MilitaryReview

FORCE
PROJECTION

		Form Approved OMB No. 0704-0188
	Report Documentation Page	

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1. REPORT DATE **APR 2003**	2. REPORT TYPE	3. DATES COVERED **00-03-2003 to 00-04-2003**
4. TITLE AND SUBTITLE **Military Review: The Professional Journal of the U.S. Army. March-April 2003**		5a. CONTRACT NUMBER
		5b. GRANT NUMBER
		5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S)		5d. PROJECT NUMBER
		5e. TASK NUMBER
		5f. WORK UNIT NUMBER
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) **U.S. Army Combined Arms Center ,Fort Leavenworth,KS,66027**		8. PERFORMING ORGANIZATION REPORT NUMBER
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)
12. DISTRIBUTION/AVAILABILITY STATEMENT **Approved for public release; distribution unlimited**		
13. SUPPLEMENTARY NOTES		
14. ABSTRACT		
15. SUBJECT TERMS		

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT **Same as Report (SAR)**	18. NUMBER OF PAGES **97**	19a. NAME OF RESPONSIBLE PERSON
a. REPORT **unclassified**	b. ABSTRACT **unclassified**	c. THIS PAGE **unclassified**			

Standard Form 298 (Rev. 8-98)
Prescribed by ANSI Std Z39-18

Military Review's **mission** is to provide a forum for the open exchange of ideas on military affairs; to focus on concepts, doctrine, and warfighting at the tactical and operational levels of war; and to support the education, training, doctrine development, and integration missions of the Combined Arms Center and Command and General Staff College (CGSC).

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CONTENTS

From the Editor

In this issue *Military Review* examines several issues. One is force projection—the ability to project combat power into a theater of operations to meet military requirements. *Military Review* also continues its series on officership. Plus, the journal presents a potpourri of articles on subjects ranging from law to cybercombat.

Force projection is one of four strategic concepts that support the two national military strategies to promote peace and stability and to defeat adversaries when necessary. Force projection is the military element of national power that systematically and rapidly moves military forces in response to requirements of war or stability and support operations. "Winning War a World Away" reports on the Objective Force's vital, successful role in Vigilant Warriors '02, the third Army Transformation wargame, sited in the Caspian region.

Increasingly essential to successful force projection is reachback. Reachback is the practice of using communications technology to tap into the array of information resources found at higher headquarters and emerging knowledge centers in the continental United States or other locales to support operations in far away theaters. "Putting Reachback into Practice" discusses how the Army's Center for Army Lessons Learned is doing just that to support forces in Afghanistan and Iraq. "Reach: Leveraging Time and Distance" examines the Army's growing use of reachback and points out the challenges to successful reachback operations.

Three independent articles address a number of wide-ranging topics. "Military Commissions, Past and Future" provides a historical context for U.S. use of military commissions. "Civilian and Military Cooperation in Complex Humanitarian Operations" discusses the intricate cooperation demanded in humanitarian operations. "The Palestinian-Israeli Cyberwar" relates how cyberwar might affect the United States.

Continuing the series on officership, "Understanding Professional Expertise and Jurisdiction" defines what constitutes the Army officer's professional jurisdiction, his sphere of expertise and knowledge. "Officership: Character, Leadership, and Ethical Decisionmaking" examines the character issues of being an Army officer. "Leadership: More Than Mission Accomplishment" argues that to improve the Army's leader development program, the officer evaluation report needs to focus less on an officer's quantifiable achievements and more on leadership's intangible results.

Rounding out this issue are the Insights and Almanac articles, plus a Book Review Essay. "Precision Launch Rocket System" argues the value of precision munitions and the need for a precision-launch rocket system that lends itself to strategic airmobility. "'Come As You Are' Warfare" examines the Bataan experience to make the point that deployed forces might have to fight without benefit of extensive preparation. "Understanding the Tactics of the Algerian War of Independence" reviews *Battle Stories*, General Khalid Nezzar's memoir, published in Arabic, of the Algerian War of Independence that lasted from 1954 to 1962.

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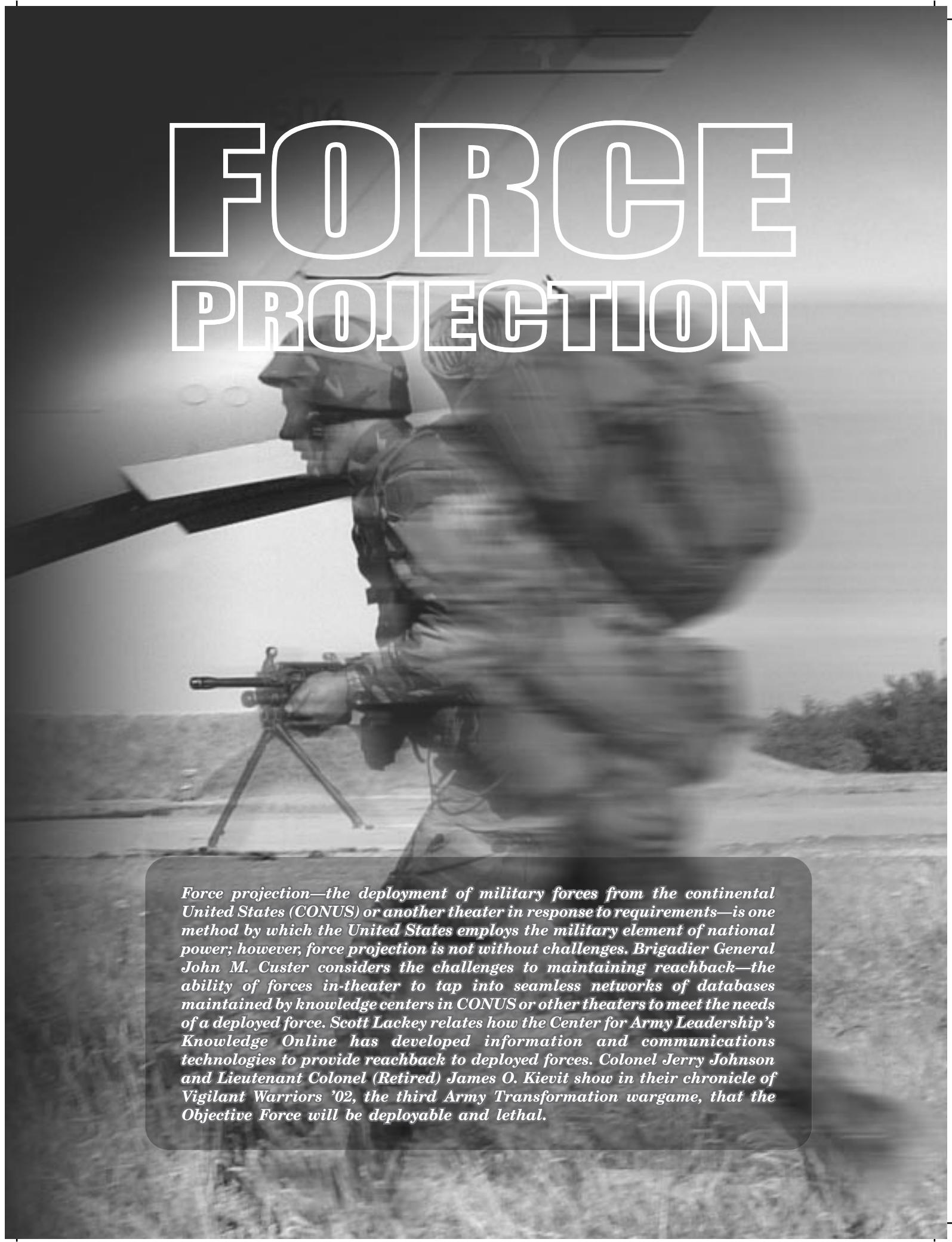
Force projection—the deployment of military forces from the continental United States (CONUS) or another theater in response to requirements—is one method by which the United States employs the military element of national power; however, force projection is not without challenges. Brigadier General John M. Custer considers the challenges to maintaining reachback—the ability of forces in-theater to tap into seamless networks of databases maintained by knowledge centers in CONUS or other theaters to meet the needs of a deployed force. Scott Lackey relates how the Center for Army Leadership's Knowledge Online has developed information and communications technologies to provide reachback to deployed forces. Colonel Jerry Johnson and Lieutenant Colonel (Retired) James O. Kievit show in their chronicle of Vigilant Warriors '02, the third Army Transformation wargame, that the Objective Force will be deployable and lethal.

Reach:
Leveraging Time and Distance

Brigadier General John M. Custer, U.S. Army

*Give me a lever long enough and a place
to sit my fulcrum and I can move the world.*
—Archimedes

REACH, reachback, split-based operations, sanctuary, knowledge center; this seemingly endless lexicon adds nothing to the Army's knowledge nor lends any credibility to the widely accepted but still nascent concept of reach. Seldom has an idea been so wholeheartedly embraced, so roundly advocated, yet so little understood or unimplemented. Yet, everyone firmly agrees that all future Army operations will incorporate multilevel, multifunction reach operations. I do not seek to disprove the utility of the reach concept; the intelligence community has organized itself around the concept for more than a decade and has proven its feasibility. However, to believe the doctrine is universal in its applicability without regard for some basic rules is folly.

The allure of reach is almost hypnotic. What other concept promises to be both an economy of force measure and a force multiplier? For the foreseeable future, the United States will remain a power-projection nation. We will continue to base the bulk of our forces within our continental boundaries and deploy them to whatever trouble spots or battlefields arise around the world. A number of factors govern our ability to deploy forces rapidly. Those factors include strategic lift, theater infrastructure, and communications and connectivity.

Having troops, especially support and staff function personnel contribute to the fight from outside the theater is an idea with immediate appeal. Also, if this is possible, it keeps major portions of the vast logistics tail in sanctuary or out of harm's way. Anything that contributes to fewer casualties is doubly appealing. However, since 9/11, the vulnerability of domestic installations has reinforced the fact that sanctuary is a relative term, while the increasing threat of sophisticated computer network attacks casts a different light on a concept that relies on and derives its value from the virtual environment. Still, information technology that enables forces outside the theater to affect a tactical situation is appealing.

The next century will prove the veracity of the many pronouncements that reachback already seems trite. Information and technology are ubiquitous. Time and distance are irrelevant. Here and

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Simplicity remains a principle of war, especially in reach discussions that revolve around broadband connectivity and simultaneous operations by multiple large staffs at numerous geographically dispersed multiechelon headquarters. The sole doctrinal definition for reach appears in Field Manual 2-33.5/ST, **Intelligence Reach Operations.**

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there simply do not exist in a virtual environment. Automation empowers individuals and small groups to the detriment of organizations. Telephony and visualization will dominate future operations. Virtual reality is reality. These simple statements are irrefutable and are the foundation of the reach concept. The bottom line is that revolutionary information technologies and the growing understanding of knowledge-centric operations, coupled with the desire to tailor combat formations to a situation, have given birth to a concept by which commanders can tailor operational forces while actually enhancing the decisionable information they receive and disseminate. All of this seems to be the perfect solution, of course, and at first glance appears easily accomplished. Yet, the truth is that reach is rocket science. The seamless orchestration of worldwide connectivity at multiple levels of security with a variety of protocols and permissions to access and interact with

hundreds of databases that autonomous national agencies, the Department of Defense, joint commands, and coalition partners maintain while also maintaining complete and accurate awareness of

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Bandwidth, coupled with compression technologies, will be the coin of the realm. . . . Again and again, operations involving deployed and secure headquarters prove that dedicated video, voice, and data circuits are crucial. Future Army operations cannot be limited to the constrained connectivities currently envisioned in the WIN-T, but operations will continue to demand far greater capabilities as a baseline.

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tactical and operational situations thousands of miles distant and providing information in an anticipatory mode is a daunting task.

The operational and organizational concept (O&O) for the Interim Brigade Combat Team (IBCT) captures the initial vision for the Army's Transformation of future tactical forces.[1] Although the document was not written as a final vision of the Army's Objective Force, it represents a bridge to the future and offers a brief survey that reveals that much is left to the imagination. In 14 instances, the document attributes specific functions, operations, and end states to reachback concepts. For example, it says that "the IBCT is dependent upon the division and higher echelons of command for reachback linkages to expand its capabilities in the areas of information, intelligence, joint effects, force protection, and sustainment."[2]

The O&O concept describes reachback as an O&O principle. Great efficiencies in manpower and equipment have been achieved in force design by proclaiming that functions that can be accomplished out of theater or through reachback to higher levels of command will not be incorporated into the IBCT organic force structure. The O&O document explains that the IBCT will execute reachback on a "routine, deliberate basis as a combat-multiplier with the concept enabling the IBCT to reduce its footprint in the area of operations without compromising its ability to accomplish the assigned missions."[3] The IBCT O&O concept lays out the following three crucial components to assure an effective reachback capability:

▢ Advanced command, control, communications, computers, intelligence, surveillance, and reconnaissance systems having appropriate interfaces with higher headquarters and outside agencies and appropriate connectivity for distributed operations at range and in urban and complex terrain.

▢ A set of tactics, techniques, and principles (TTP) to govern staff activity.

▢ A well-trained staff that understands the capabilities available through reachback and how to employ them for mission requirements.

These basic requirements might of themselves be incredibly difficult to achieve, but arriving at a definition for reachback that everyone can agree on is problematic. Simplicity remains a principle of war, especially in reach discussions that revolve around broadband connectivity and simultaneous operations by multiple large staffs at numerous geographically dispersed multiechelon headquarters. The sole doctrinal definition for reach appears in Field Manual 2-33.5/ST, *Intelligence Reach Operations,* which states, "Intelligence reach is a process by which deployed military forces rapidly access information from, receive support from, and conduct collaboration and information sharing with other units (both deployed in theater and outside the theater) unconstrained by geographic proximity, echelon or command."[4]

In a larger more generic context, which embraces operations, logistics, and the array of other disciplines from medicine to maintenance envisioned to benefit from this new way of projecting power, a better definition might be, "Reach is a virtual and collaborative strategy to access, share, and disseminate information in support of intelligence, maneuver, and logistics regardless of distance, time, or echelon."

The Future of Reach

Rather than stumbling through a doctrinal jungle in its effort to develop and refine operational reach concepts, the Army should first examine some of the problems, solutions, and TTP proven successful during a decade of worldwide intelligence reach operations. The maturation of operational reach concepts and offset command and control between the austere capabilities of Operation Desert Storm and the robust broadband architectures of Afghanistan are astounding. That the XVIII Airborne Corps, as the joint task force, is operating a Spartan joint intelligence support element at Baghram, while virtually the entire U.S. Central Command (CENTCOM) staff remains in Tampa, bears stark contrast to the operation 11 years ago when CENTCOM operated from Saudi Arabia, and communications links between forward units and those supporting the units from the continental United States were tenuous and

A soldier monitors network devices within a brigade subscriber node and across the IBCT wide-area network, Fort Gordon, Georgia.

Reach is rocket science. The seamless orchestration of worldwide connectivity at multiple levels of security with a variety of protocols and permissions to access and interact with hundreds of databases that autonomous national agencies, the Department of Defense, joint commands, and coalition partners maintain while also maintaining complete and accurate awareness of tactical and operational situations thousands of miles distant and providing information in an anticipatory mode is a daunting task.

finite. By examining intelligence solutions, we should derive some tenets whose codification would make reach more achievable.

Communications is the essence of reach. The first commandment of successful reach operations is that a robust, dynamic, dedicated broadband architecture is essential. Bandwidth, coupled with compression technologies, will be the coin of the realm, and if Archimedes were alive today, he would immediately recognize it as the lever in his simple machine. Nothing is possible in a remote environment without a dedicated networked, web-based, virtual communications architecture. That requirement cannot be wished away by such statements as, "The tactical force will be linked to the Global Information Grid (GIG) for connectivity."

During Operations Desert Shield and Desert Storm, the world was forever changed when the Army fielded the TROJAN SPIRIT network and tactical satellite equipment. The advent of dedicated, secure, broadband tactical equipment gave commanders the connectivity they had long envisioned. However, like the appetite for imagery, the require-

ment for bandwidth in a reach operation will be insatiable. Multiple simultaneous video teleconferences between headquarters located thousands of miles apart are essential. Collaborative tools requiring large amounts of graphic data and imagery to be moved in real time and whiteboarding capabilities used to tie together commanders, staffs, and higher headquarters are other undeniable baseline requirements.

Again and again, operations involving deployed and secure headquarters prove that dedicated video, voice, and data circuits are crucial. Future Army operations cannot be limited to the constrained connectivities currently envisioned in the Warfighter Information Network-Tactical (WIN-T), but operations will continue to demand far greater capabilities as a baseline. Compression technologies will be significant enablers when combined with true broadband capabilities. Requirements must always be the primary consideration when contemplating any reach operation, and commanders must be familiar enough with communications-architecture considerations to ensure their operations will not be diminished by bandwidth constraints.

Information about information. Ten years ago, high-echelon commanders were concerned about a lack of bandwidth constraining their ability to disseminate and receive information. Today, a prevalent complaint heard from combat arms company and battalion commanders at national and joint readiness training centers is about that same bandwidth constraint. Whereas 10 years ago those concerned

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with the future saw the problem as bandwidth, today's true visionaries realize the problem is information about information. Eventually the Army will realize that bandwidth is a requirement regardless of cost and will solve its dilemma with either a purely commercial application or by implementing broadband network system solutions.

The dilemma, however, can become the classic "be careful what you ask for" problem as "junk expands to fill available space." Once given the bandwidth they deem necessary, commanders at every level will be inundated with information unless they apply information-management technologies along with advances in bandwidth. As databases expand, grow increasingly intricate, and employ redundant firewalls and multilevel security applications, web-based collaborative tools; infobots; dynamic reasoning engines; data mining; metadata tagging; bulk data warehousing; retrieval technologies; and automated Internet search engines, slaved to machine language translation technologies, will be recognized as the enablers of the future.

Brilliant Push, Smart Pull. Managing information is already proving to be a crucial survival element. A "predictable push and reliable pull" strategy that involves bandwidth and information management will become the second reach commandment.

Brilliant Push occurs when the producers of information are knowledgeable of a customer's requirements and can send the desired information to the customer without further requests. Today, Brilliant Push is accomplished through the Joint Dissemination System or the Automated Message Handling

System. In the future, information dissemination management systems, which employ a series of infobots (autonomous software packages that simulate human activity in that they automatically search for desired information) will greatly enhance Brilliant Push.

Smart Pull occurs when the customer (usually the forward-deployed headquarters, but in reality any element in the network) is familiar enough with existing databases to anticipate the location of desired information. Knowledge of the types and locations of multiple databases (logistics, depot inventories, medical information, intelligence, maintenance procedures) can greatly increase the efficiency of information exchange by saving time and effort on the part of staff members at every echelon.

Smart Pull is greatly enhanced through the use of home pages. The concept of Smart-Pull homepages expands the scope of the traditional homepage. Single-discipline production centers, in accordance with the requirements expressed by customers, dedicate portions of their homepages to the posting of reports and products as they become available. This enables customers to pull data and reports, as required, thereby reducing the load on communications links and local storage. Should the customer determine that specific information is required continuously or on a periodic basis, the customer can request the report or product to become a part of his automatic Brilliant Push profile.

Such information management and coordination strategies demand the predeployment training of elements that will work together while separated by great distances. Virtual operations demand prior training and coordination to develop TTP for predictable information exchanges. Any adopted information-management techniques must provide "maximum access with minimum clicks" in predictable, reliable formats.

Fence support elements in sanctuary. Support elements and assets in sanctuary must be fenced on behalf of the deployed commander they support. This precept is always readily agreed on at the beginning of any operation designed to receive support from out-of-theater nonorganic elements. Time, however, has a way of fading all commitments, and as new crises develop, each requires attention, analysis, information, logistics, and planning support. The originally dedicated support team is drawn on to work immediate and seemingly more urgent problems. The deployed commander, still in need of the supporting assets but no longer able to get the full support his force requires, swears never

A UAV "pilot" (*left*) and sensor technician of the Joint Forces Air Component Command prepare to operate an RQ-1B Predator during operations in Afghanistan, 7 April 2002.

US Air Force

Blurring lines between the traditional tactical, operational, and strategic levels will create greater complexity. . . . This dilemma has recently risen in Afghanistan as the digital video feed from unmanned aerial systems is simultaneously viewed at multiple locations and echelons. Questions from higher headquarters concerning why specific actions have not been taken or results achieved have been a repeated headache for tactical commanders. . . . The danger is that reachback will, in fact, result in grab-forward.

to trust this concept called reach in the future.

Time and again this dilemma has occurred, and most certainly will again. Joint commands in particular, responsible for huge portions of the earth's surface and faced with a constant stream of erupting crises, are forced to shift manpower whenever and wherever it is immediately required. This must be faced as a fact of life and should be kept in mind as the Army develops a service strategy for reach or knowledge centers to support its operations.

Reduced footprint and inherent redundancies. One of the most appealing facets of reach is the fact that fewer soldiers are deployed forward into the hostile theater. However, the success of the forward-deployed force is totally predicated on an element located outside the area of operations. Therefore, another basic principle of successful reach is that although the footprint of the deployed force can be greatly reduced, it might in fact require more total personnel and resources to accomplish the mission than if the entire force were forward deployed.

Each staff element will require a small contingent forward to directly support the commander. And in the sanctuary location, it is highly unlikely that any element will be able to reduce its personnel requirements. In fact, an expanded staff will almost certainly be required at the secure location to perform 24-hour operations to provide all staff requirements for the deployed force. This realization is essential. Reach operations will not diminish personnel and resource requirements but will increase them. The beauty of the concept is that although more people might be actually deployed they will not be susceptible to becoming casualties, and therefore, they will not cause a logistics support concern for the deployed tactical commander.

Training the digital squad for split-based operations. Paramount in developing reach strategies should be the more efficient use of human resources within a given timeframe. Concurrent with simultaneous manning of two support headquarters, one in theater and one supporting from outside the theater, is the new requirement to train redundant

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skill sets. If in the past each operation required a single soldier to be trained to do a specific operation, or two in the case of 24-hour operations, reach will require four soldiers at a minimum to be able to perform that same function. The requirement could easily expand to six if rotations or long-term operations are considered. Digitally enabled units and squads operating in multiple parallel headquarters present commanders with a significantly more challenging training dilemma than has traditionally been the case. Reach operations cannot be accomplished "out of hide." Units must be resourced with additional amounts of personnel and equipment, or split-based operations will be doomed to failure.

Units, leaders, and personnel deploying forward into theater must have developed a close working relationship with the organization supporting them from outside theater before deployment. To believe that TTP will ever be interchangeable or to expect deployed units to simply plug into an unfamiliar architecture or higher unit is a recipe for disaster.

The hierarchy of helicopters. One often-repeated anecdote growing out of the Vietnam war was that commanders would invariably take the opportunity to influence subordinate command levels in combat situation if given the chance. The virtual environment presents commanders at every level this same opportunity. Blurring lines between the traditional tactical, operational, and strategic levels will create greater complexity for tactical commanders and almost certainly will require more mature and experienced leaders as operations transform from a physical plane to a mental one. With a common operational picture, everyone will have the same view of the battlefield. With increased Blue Force resolution and vastly improved intelligence, surveillance, and reconnaissance (ISR) integration, the temptation to be the first to make the right decision might prove irresistible. This dilemma has recently risen in Afghanistan as the digital video feed from unmanned aerial systems is simultaneously viewed at multiple locations and echelons.

Questions from higher headquarters concerning why specific actions have not been taken or results achieved have been a repeated headache for tactical commanders. Who and at what level will firewalls be provided to allow the tactical commander freedom of decision? Is it the combatant commander who insulates his theater from national-level influence? Will he then tell the battalion commander how to maneuver his forces? Restraint is a difficult thing for many military commanders to exercise, and with a virtual environment giving high-level, out-of-theater commanders omniscient views, this problem will continue to be a concern. The danger is that reachback will, in fact, result in grab-forward.

Building the Knowledge-Projection Platform

Reach occurs at many levels. During the debacle surrounding the sinking of the Russian submarine *Kursk*, Secretary of Defense Donald Rumsfeld said at a Pentagon news conference that "the United States was utilizing reachback technologies to assist the Russians."[5] When questioned by the media for details, Rumsfeld sheepishly admitted that the reachback technology he had referred to was a telephone.

A phone call is certainly the most elementary definition of reach, and a simple response to a request for information is the most elementary operation within the knowledge center. At this lowest level of response, the sanctuary staff might not even fully monitor the tactical situation forward but simply respond to a request. This type of reach might be related to an infrastructure insufficient to support complete tactical awareness or to a forward operation being in its initial stages and the situation being still unrefined.

A higher level of operation requires the sanctuary to establish a virtual singularity with the forward-deployed headquarters. In this scenario, the sanctuary has full situational awareness and provides products and information in a Brilliant Push-Smart Pull context. The sanctuary staff at this level begins to operate as a prism sifting and filtering information from higher headquarters so as not to overwhelm the forward element. The sanctuary must be careful not to constrain or interfere with time-sensitive information while at the same time working to link databased information to homepages, thereby guaranteeing access both up and down echelons.

At the highest level, sanctuary staff elements must be the commander's anticipatory-knowledge agent, independently planning and fully participating in future operations. Networked with deployed tactical elements, higher headquarters, and national or-

ganizations, the knowledge-projection platform must fully understand the commander's intent, the current tactical situation, and assume the lead for planning and resourcing future operations as well as ISR and battle management at the commander's behest.

This knowledge center, or Home Station Operations Center, is in reality the forward-deployed force's knowledge-projection platform. Just as the installation, airfield, or port from which the force embarked is a power-projection base, so the knowledge-projection platform sustains the force with the vital information it requires. The center is both command post and research node, and it must at all times have complete cognizance of the deployed commander's intent; understanding the forward force's situation and current mission status; access to all relevant data; and knowledge of what is being planned at higher headquarters and national levels. The knowledge center, in its anticipatory mode, should be researching and producing items the forward commander might not yet realize he needs. When such products become important, the deployed staff can simply pull them from the homepage.

What should the Army focus on now as it builds organizations whose goal is ultimately to be the deployed commander's anticipatory knowledge agent and knowledge-projection platform? How is this platform organized? Where and with what Army organizations? Which functions are best performed in sanctuary, and which must be accomplished forward under the commander's direct supervision?

Force-protection issues in the area of operations will continue to be prime considerations in deciding how much of the force should be deployed forward. Every situation will be different, and every commander will be more or less willing to accept the option of remotely locating portions of his organic force and support elements. Including the supported commander in all reach planning decisions is essential. Can intelligence fusion and ISR integration be accomplished efficiently in sanctuary, or do subsets need to be worked forward? Can asset management be efficient if separated from mission management by 7,000 miles and 12 time zones? Will the commander allow his plans section to work virtually in sanctuary, providing an austere forward plans element with their products? The proximity of the sanctuary plans staff to a simulations center might greatly enhance the staff's capability, and if the staff can receive the commander's guidance and intent via dedicated video teleconferences, it might, in fact, prove to be more effective.

The Army must examine closely the operational architecture within which the Army employs reach operations. Reach has vertical and horizontal elements and at the heart of its success is how these contribute to the concept and how the Army can most efficiently organize, use, and array personnel to support this concept. A virtual network implies that forward elements can draw information from any number of sources traditionally arrayed in various echelons and from databases belonging to any agency. In some cases, and with units who have worked together over long periods of time, this might be possible, but for the majority of the time, it is

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just not that simple. This is where an enabling headquarters must be included in the operational architecture, it cannot be an afterthought. This enabler might be—

  The deployed units' organic higher headquarters or home station organized to provide Knowledge Projection Center support.

  An Army component geographic Knowledge Projection Center with close ties to the theater joint command.

  A portal provider linking the forward unit to an array of functional databases.

The point is that some entity must be practiced in support, performing collection-management functions; synchronizing combat power and effects; collating data for homepages; planning and resourcing future operations; and parenting the deployed force. Units conducting deployed operations must be able to reach into a higher facilitating element. They will never be able to simply locate appropriate databases and plug into them, regardless of how alluring and romantic that concept might appear.

That the Army will ever fight in any organizational construct other than as a member of a joint or combined contingency task force is highly improbable. At first glance, reliance on the higher joint organization to provide a knowledge center for the Armed Forces to reach into seems appealing. Any such reliance, however, will ultimately prove to be a mistake. To rely on a joint headquarters, even if augmented by dedicated Army elements for logistics and operations support, fails the common-sense test. In

most cases, the joint framework demands more information than it provides, and as long as the forward deployed force has access to broadcast information and direct downlinks, the need for the

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sanctuary to provide data is lessened. The joint theater common relevant operational picture presented by the Global Command and Control System will never provide the Army component commander with the granularity and level of detail he requires to conduct tactical-level maneuver operations. Service components will continue to have requirements for intelligence, operations, and logistics-specific information.

Extensive training for knowledge-center and forward-deployed personnel is essential. In fact, there should be no distinction between these two elements. Manned by administrative, intelligence, operations, logistics, and planning staff personnel at a minimum, and with a practiced plan for augmentation depending on specific contingencies, the sanctuary staff is a macrocosm of the austere staff deployed forward with the combat force. The skills both staffs need are virtually identical, and the utility of rotating personnel from sanctuary to the deployed location and back will build and preserve a sense of urgency within respective staff elements. The sanctuary staff will not be able to count on a train-up period in preparation for a contingency. Developing and maintaining familiar working relationships with myriad joint- and national-level organizations will be integral to any reach operations center. TTP for obtaining, developing, and formatting information to be passed forward will be vital.

Training will be a constant, but leadership within the knowledge center will be a defining requirement. There are many who feel reach is a concept in which the Army should not invest simply because it obviates the shared sense of burden—that there is a moral requirement for all to suffer together. As long as leaders can maintain a sense of urgency within the sanctuary, nothing could be farther from the truth. Those forward are constantly worrying about survival, rain on their equipment, or the hun-

dreds of other problems threatening their success. Naturally, the quality of their work suffers. The sanctuary provides a secure location where clear, rested thought can contribute to analysis and planning, which is then contributed forward in a collaborative environment. Those in sanctuary must be constantly aware of the threats forward so as to preclude the personal arguments and frustrations that inevitably arise.

The sanctuary should never be viewed as a clearinghouse for all information. Such a construct would only prove to constrain information exchange and is the antithesis of a web-based network design. Time-sensitive information, such as signals intelligence, must be free to flow directly to the ultimate consumer at the lowest tactical level in real time, whether that consumer is an F-16 pilot or an armor company commander. This point illustrates the power of and necessity for broadcast systems and direct downlinks. The capability to immediately disseminate time-sensitive information to all echelons and elements will continue to be a basic building block for reach operations.

Locating and resourcing the Army's knowledge-projection platforms will prove to be absolutely crucial decisions. After making a decision, users can construct the required infrastructure, so parameters such as existing buildings or communications architectures should bear only minimal weight in the decision process. Likewise, access to Army, joint, and higher headquarters should be a consideration, but we must also consider access to dynamic simulation and modeling capabilities. Universities and education centers should also be considered if the knowledge center is to provide a broad horizon of cultural, socioeconomic, political, and technical expertise. We must be careful not to dilute this effort by building too many knowledge centers that might, in the long run, prove unaffordable.

Operations in a virtual environment should preclude the ownership battles the Army has often witnessed between major elements and commands. Knowledge-projection platforms must be connected within the GIG as well as within a secure virtual ring. They should be geographically oriented, possibly serving the Pacific, European, and Southwest Asian theaters, respectively, and have a subordinate relationship to the Army component commander at U.S. Pacific Command, CENTCOM, and U.S. European Command joint commands. Much of the manning for each center should be drawn from the component command's staff. The Army will fight within a joint construct and should organically organize to support that relationship and framework. Each of the knowledge centers should incorporate the theater analysis and control element (ACE) as

well as operations and logistics staffs of equal capabilities. As the Army develops an operational architecture for the Objective Force, it should include a knowledge-projection structure as an essential force multiplier. Such operations will not occur by augmentation nor be created "out of hide" by units tasked at the last minute. These organizations should be equipped and manned as ALO-1, TOE units. They must be as highly trained and as ready to accomplish their mission as are the combat units they will enable.

An alternative strategy might be to capitalize on the five existing Army Reserve Intelligence Support Centers and leverage their joint manning and training missions into home station operations centers. Already possessed with superb bandwidth and connectivity, these centers could easily be expanded to integrate operations and logistics support elements. This might prove an excellent mission for the reserve components of all services, with tailored multicomponent, multiservice organizations dedicated to various echelons, theaters, war plans, or CINCs trained to specific support and reach missions. These knowledge-projection centers could be war-traced to joint or Army headquarters. Supporting units would then develop a habitual relationship with supported units and train on the same machines they would operate during mobilization and wartime. The evaluation of such organizations might ultimately optimize an infrastructure that already largely exists.

Finally, with the development of IBCTs, the Army began developing a doctrine for reach, subsequently testing and proving reach doctrine in a variety of operational scenarios. Virtually all Army experience and success with reach operations has been generated within the intelligence community. The Army's Intelligence and Security Command (INSCOM), in its role as the deputy chief of staff for operations and plans executive agent for the Land Information Warfare Agency, has developed in parallel an Information Dominance Center (IDC). The IDC has researched and built numerous sophisticated automated tools to mine, correlate, and visualize structured and unstructured data. These tools and the IDC are exactly the types of synergies on which the Army should capitalize during its experimentation. One solution might be for the U.S. Army Train-

ing and Doctrine Command to designate the Intelligence Center at Fort Huachuca, Arizona, as the Army's proponent for reach operations, with subordinate supporting efforts from the Signal Center at Fort Gordon, Alabama, and the Combined Arms

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Some entity must be practiced in support, performing collection-management functions; synchronizing combat power and effects; collating data for homepages; planning and resourcing future operations; and parenting the deployed force. Units conducting deployed operations must be able to reach into a higher facilitating element. They will never be able to simply locate appropriate databases and plug into them, regardless of how alluring and romantic that concept might appear.

Support Command at Fort Lee, Virginia. The Combined Arms Center at Fort Leavenworth could then act as the integrating headquarters for reach doctrine development. Subsequently, INSCOM could be designated as the executive agent for operational reach concept development being resourced and tasked to build the portals through which the various knowledge centers conduct operations.

Will bandwidth be the kind of lever Archimedes spoke of four centuries ago? Could the fulcrum in this case be the knowledge-projection platform that, when properly resourced, would provide a foundation to transform the way the Army conducts operations in the next century? Leader development and training will continue to be key factors contributing to the success or failure of this concept. As the Army continues to develop and apply operational reach concepts, it must keep in mind the complexity of such operations and realize that reach, which many have so quickly embraced, is hardly the panacea for which so many have wished. *MR*

NOTES

1. U.S. Department of the Army (DA), *The Interim Brigade Combat Team, Organizational and Operational Concepts* (Washington, DC: U.S. Government Printing Office [GPO], 30 June 2000).
2. Ibid.
3. Ibid.
4. DA Field Manual 2-33.5/ST, *Intelligence Reach Operations* (Washington, DC: GPO, publishing date unknown).
5. Donald Rumsfeld, press conference, Washington, D.C., 2000.

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Putting Knowledge Reachback into Practice

Scott W. Lackey, Ph.D. © 2003

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N THE MARCH-APRIL 1998 *Military Re view* article in which he launched the University After Next (UAN) initiative, General Montgomery C. Meigs created a vivid image of future operations.[1] Meigs described a scenario, set in 2014, in which a unit, presumably of battalion or brigade size with staffs even leaner than those of today, engages in frenetic preparations for deploying to an overseas contingency operation (CONOP). According to Meigs, knowledge is the commodity that units most urgently need.

A deploying force gains knowledge in many ways, such as from the collective knowledge of its members (the commander, principal staff, subordinate commanders, and soldiers) gained through real-world experiences or learned in Army schoolhouses and rehearsed and honed in realistic collective-training environments, such as at combat training centers (CTCs). Robust, effective linkages with realistic virtual simulated environments broaden knowledge gained at CTCs. Advanced collective training and higher education must rest, of course, on a solid base of individual self-development, training, and physical conditioning.

The Army cannot design training environments to meet every possible contingency, however. No educational program can anticipate all of the challenges its students will face. No body of collective wisdom gained from professional experience will give a unit, its commander and staff, its subordinate commanders, and its soldiers everything they will need to surmount every operational or tactical problem. Situations will arise that will require reaching back to external sources of knowledge.

Reaching back to higher headquarters, which traditionally enjoy larger staffs and larger reservoirs of knowledge, experience, and information, is not a new concept. What is new is the array of information resources now available in real time or near real time. Also new are the electronic networks used to deliver information from knowledge repositories, whether human or electronic, to those requesting knowledge.

Exploiting the full array of knowledge resources constitutes the challenge of Knowledge Reachback. The Center for Army Lessons Learned (CALL) has stepped up to this challenge. In 1998, Meigs, as the commander of the Combined Arms Center (CAC), chartered CALL as the U.S. Army Training and Doctrine Command (TRADOC) Project Office, UAN. The UAN charter tasked CALL to harness information and communications technologies to support warfighters; in essence, to create knowledge resources and tools that U.S. forces would need to effectively use knowledge resources.

Developing new technologies and implementing their widespread use across an organization as vast as the U.S. Army takes time, but CALL began the task with solid advantages. CALL possessed a vast reservoir of knowledge, including electronic repositories of its own lessons learned publications; training feedback products from the CTCs, dating from the early 1980s; observations made by trained subject-matter experts (SMEs) of U.S. Army operations since 1989; and Army and joint operational records and after-action reports from as far back as the Vietnam war. As an organization designed to collect and disseminate best practices and good ideas, CALL

was uniquely positioned to assume the role as a force for change and learning within the Army.

The ability to reach back and access knowledge and information when needed is key for any organization that confronts multifaceted challenges every day across the globe. The challenge is truly global, given continued forward basing of large parts of the Army and contingency operational deployments worldwide. Accordingly, CALL targeted the World Wide Web and other wide-area networks as global dissemination engines to make network-accessible knowledge available to the U.S. military user worldwide.

CALL uses Web technologies—

☐ To disseminate its own publications as well as Army and joint operational records and lessons learned.

☐ To direct Army, joint, Department of Defense (DOD), and other service users to other web-based sources of information.

☐ To assemble best-of-class search-engine capabilities that allow users to tame the vastness of networked knowledge resources.

Even with such powerful on-line capabilities, problems in disseminating needed information persist. Some people are still either unfamiliar with or not accustomed to using web-based resources on a regular basis. CALL uses its location at Fort Leavenworth to spread the word of the power and availability of its information resources to students of the Combined Arms and Services Staff School, the Command and General Staff College (CGSC), the School for Advanced Military Studies, and the pre-command courses.

However, sometimes it is not enough to know that on-line information technologies and resources are available to help commanders and staffs confront and overcome daily problems and challenges. They must have time to use these resources, and time is what most units lack, particularly in a crisis situation. The Army has already established a 96-hour timetable from initial alert to arrival in the theater of operations for the Stryker Brigade Combat Team, with only an additional 12 hours allowed for deploying an entire division. As a constraining factor, time, or the lack thereof, will only increase.

The knowledge, experience, and information readily available to a unit's higher headquarters might sometimes be insufficient to address immediate challenges. If so, the unit must be able to draw on a broader knowledge base that consists of an interactive mixture of electronic library and archival

knowledge; analog reference; research resources; and SME networks or communities of practice. These resources must be linked via electronic means with the requesting unit and be capable of evaluating reports of the situation at hand and to propose and continuously evaluate various solutions and remedies across this knowledge base.

A unit reaches back or accesses these resources via communications linkages it has on hand, whether they are tactical radio, telephone, fax, or as is increasingly the case, electronic wide-area networks

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via the Internet, the classified Secure Internet Router Protocol Network (SIPRNet) or other theater-specific networks. Units will still largely work through chains of command to obtain needed information. However, with the increasing availability of computer networks to staffs operating in even relatively immature theaters and the increasing computer literacy among officers and noncommissioned officers (NCOs), staffs can obtain needed information and knowledge directly from remote sources across the knowledge base without lengthy coordination. Where to look for needed information and knowledge will become an increasingly significant staff-training issue for implementing effective Knowledge Reachback. CALL, in partnership with the Battle Command Training Program (BCTP), is already addressing the issue.

CALL's Knowledge-Management Capabilities

CALL has been a knowledge-management organization since its inception in 1985, long before the term became fashionable. CALL emerged as an Army organization because of a perceived knowledge-management failure on the part of the Army to capture, analyze, and disseminate the lessons learned of the units rotating through the National Training Center in the early to mid-1980s. CALL's rapid development of an effective observation, collection, analysis, and dissemination system quickly led

the Army to expand the lessons-learned system to include actual operations, beginning with Operation Just Cause in December 1989.

The emergence of the user-friendly World Wide Web interface with the Internet and the almost simultaneous union of CALL with the old Army Knowledge Network (AKN) Directorate in 1996 led to a dramatic evolution in the business of lessons learned. First, the definition of lessons learned broadened dramatically to include things from which an Army unit, leader, or individual soldier could derive

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immediate benefit. No longer did they have to wait for a CALL publication to arrive by regular mail at battalion or brigade headquarters; they could go on-line and retrieve CALL publications from the Web, conduct searches against their content, and read and absorb only those sections that were of direct and immediate benefit to them.

CALL posts all publications, with one exception, on its website in the hypertext markup language (HTML) mode. The exception includes the initial impressions reports that combined arms assessment teams generate. CALL fields initial impressions reports to collect lessons learned from CONOPs. Users desiring to download an entire CALL publication can do so in portable document format (PDF).

Unifying CALL with the AKN also led to creating the CALL database out of the old Army Historical Archives System. Users can retrieve thousands of records from recent Army operations, including operations plans, orders, fragmentary orders, after-action reports, standard operating procedures, message traffic, and other documents. Users of the CALL database can access these electronic documents either by drilling down through the archival hierarchy established by CALL historians and archivists or by using the powerful search engines available within the Excalibur archival software that CALL uses.

CALL operates three CALL databases: a public-access CALL database, a restricted-access CALL database, and a classified CALL database. CALL's public-access database consists primarily of Army publications, such as a complete electronic collection of *Military Review* dating from its inception in 1922. The database also contains CGSC Masters of Military Arts and Science theses and SAMS monographs that have been approved for public access. The restricted-access CALL database contains Army and joint operational records; lessons learned; and tactics, techniques, and procedures that are for official use only and have not been approved for public release. The public-access CALL database and the restricted-access CALL database are available from the CALL home page.[2] The restricted-access CALL database is password and ID protected, although U.S. Armed Forces and DOD civilian employees can obtain access by filling out an electronic on-line form. The classified CALL database contains classified Army and joint operational records and is available only on the classified SIPRNet. The classified CALL database has a separate electronic application process similar to the one for the restricted-access CALL database off of the CALL SIPRNet site.[3]

Initial fielding of the software included a powerful pattern search and retrieval engine, which searched against binary code patterns underlying text documents. This type of search capability allowed users to search for terms of which they were uncertain of the spelling; for example, "How do you spell Nebucanezzar Division?" But more important for the early and mid-1990s, the powerful pattern-search engine was able to compensate for over 40 percent of optical character recognition (OCR) errors on scanned documents. Many of the documents converted to digital format by the old AKN directorate had been of poor quality, sometimes being third, fourth, or even fifth-generation photocopies. The importance of the pattern-search engine has declined over time, however, because with the growth of the CALL database, its searches tend to yield too many hits for most users to absorb.

The CALL database also possessed Boolean and later concept-based search capabilities. Boolean searches retrieve information based on word relationships within a page of text; for example, this and that, this or that, this not that, and so on. Boolean searches are also exact searches and do not take into consideration misspellings caused by human error or by faulty OCRs. The Boolean capability of proximity searching for word relationships on the same page of text represents a powerful search technique. While sorting and limiting information retrieval in this fashion was not initially important, given

US Army

COL James L. Mowery of CALL confers with LTC Charles Bush and other artillerymen at Task Force Hawk's forward operating base in Albania, 8 June 1999.

CALL uses Web technologies to disseminate its own publications as well as Army and joint operational records and lessons learned; to direct Army, joint, DOD, and other service users to other web-based sources of information; [and also] to assemble best-of-class search-engine capabilities that allow users to tame the vastness of networked knowledge resources.

the small number of documents on-line, the gradual increase in size of the CALL database to its current 2.5 million pages has made Boolean searching an important technique for locating needed information quickly within the digital vastness of the CALL database.

Concept-based searching is the most recent addition to the search tools available within the CALL database, and it is the most immature in terms of capability. However, its ability to ferret out documents containing words with related meanings to the search terms entered is an important one that will lend itself to the eventual augmentation of the search engine by powerful thesauri, including the CALL thesaurus.

The CALL thesaurus also represents an important CALL contribution to knowledge management. CALL initiated the development of an in-house thesaurus because then-current military thesauri did not address to a sufficiently detailed degree the Army operational and tactical levels of war, which are the focus of CALL's lessons-learned program. The CALL thesaurus currently consists of about 20,000 individual terms, structured in relationship hierarchies. The CALL thesaurus is also directly linked to the Alta Vista Internet search engine, so users can search the Web for sites related to the terms they are researching. Many government agencies and private Internet technology companies are interested in obtaining the CALL thesaurus to integrate

into their search-engine products.

Since establishing its Web presence in 1995-1996, CALL has been vitally interested in providing users with advanced capabilities to search the World Wide Web in the most effective way possible. CALL has developed its own military domain search engine, which allows users to search the content of targeted military domain websites on the Internet and SIPRNet. The CALL military domain search engine is particularly valuable to the SIPRNet user, because its half-universal resource locator (URL), half-Internet protocol (IP) character makes the SIPRNet

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much harder to browse than the Internet. CALL also developed the concept-based knowledge-based discovery tool to allow users to refine network searches on the basis of word meanings and uses search engines such as the Mil.com search engine to help users pinpoint the location of needed information online. All of CALL's capabilities to search the Internet are posted on the CALL website for anyone to use, including the general public.

CALL provides a huge number of links to other websites of interest to the Army user and in deciding which sites to link to, it takes a broad view of what could be of possible interest to users. For example, CALL devotes an entire section of its website to media links, since it realizes that the media are often good sources of information on areas and situations that an Army unit might encounter in a CONOP. The news media also often offer a perspective valuable because of its variance from military sources. Of course, CALL also provides linkages to all major Army and other military sites of note.

Not knowing how to look or where to access these capabilities can pose a challenge, particularly under the stress of an actual CONOP. So, CALL and BCTP Operations Group Delta launched the Knowledge-Reachback initiative. They conceived Knowledge Reachback as a means of providing the

operational commander and staff with targeted Knowledge-Reachback assistance to achieve information dominance. Knowing where to look is what Knowledge Reachback brings to bear in support of the operational commander and staff.

The CALL-BCTP Knowledge-Reachback Partnership

In June 1999, the U.S. Army confronted the challenge of the harsh, rugged, war-torn environment of Kosovo. With U.S. allies and partners, the Army entered the region with the common mission to return peace and stability to that strife-ridden country. Lieutenant General Mike Steele, CAC, recognized immediately that Kosovo would pose unique challenges to U.S. units. He instructed CALL and BCTP Operations Group Delta to develop a plan to put Knowledge Reachback into operation in support of U.S. Army forces in the Balkans.

Within a month, CALL and BCTP Operations Group Delta had devised an operational concept for Knowledge Reachback. They began using strike force battle staff rock drills and exercises that the Battle Command Battle Laboratory at Fort Leavenworth was testing. A CALL Knowledge-Reachback analyst served as a part of the Home Station Support Node (HSSN), and a BCTP Operations Group Delta observer-trainer monitored the use of Knowledge Reachback during exercises. The strike force exercises highlighted the need for effectively managing information requests within the deployed headquarters, overseen by the unit's chief of staff, to ensure that they were routed to the best source for information. The chief of staff could also ensure that requests were prioritized and given appropriate emphasis by the staff commensurate with their importance in meeting the commander's critical information requirements.

A rear-based activity, such as the HSSN, while it might be an effective provider of electronic information to a forward-deployed force, could never obtain clear enough or current enough visibility on events in the theater to be able to manage the request for information process from afar. Also, rear-based management might potentially overlook traditional sources of information within a unit's chain of command, which the unit could access more quickly and efficiently.

In January 2000, CALL and BCTP Operations Group Delta began the first operational test of Knowledge Reachback during the U.S. European Command (EUCOM) 2000 exercise. The exercise

US Army

Village elders are interviewed by an Associated Press reporter about the condition of their town's school in the Salong District of Afghanistan, 19 December 2002.
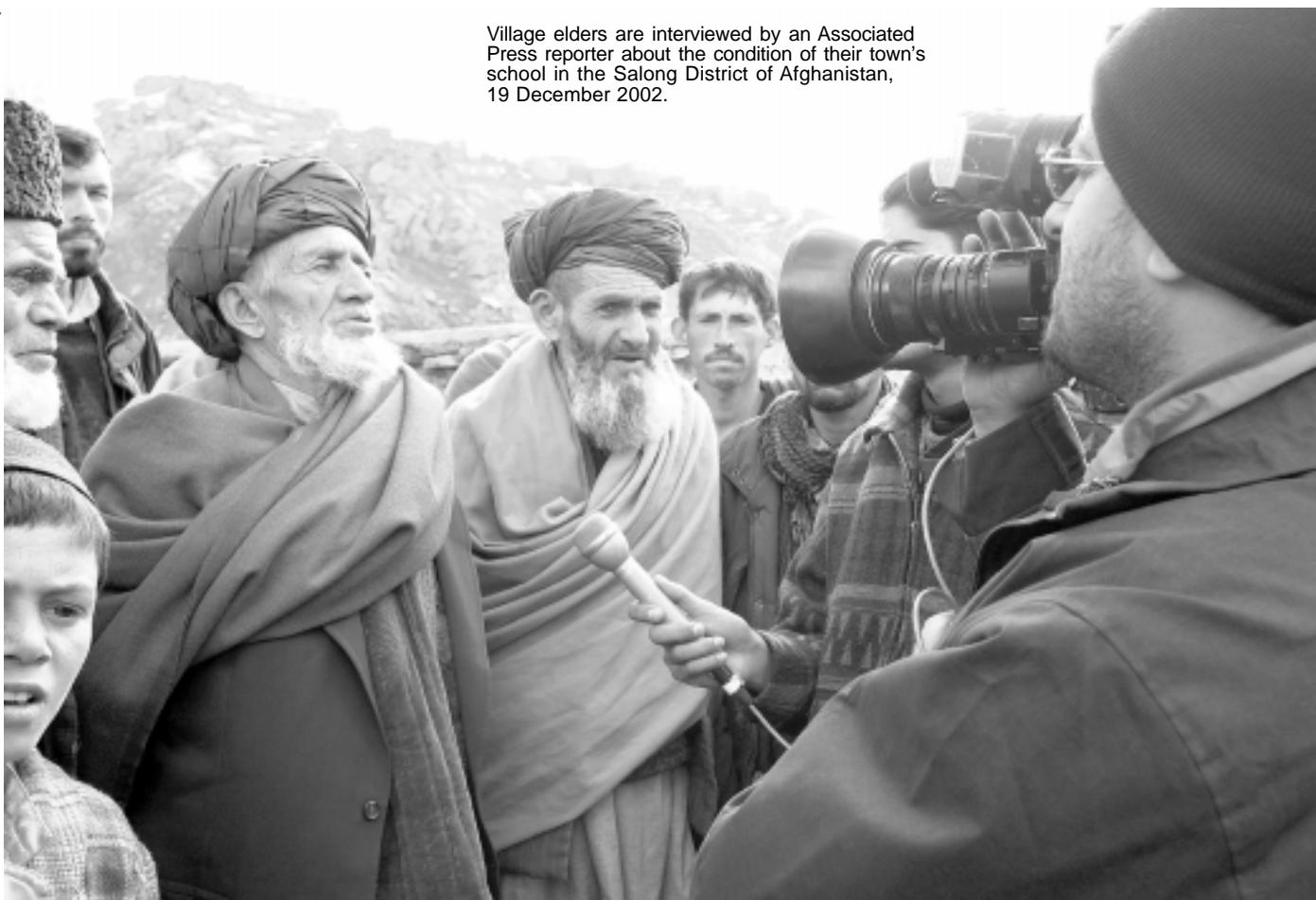
CALL devotes an entire section of its website to media links, since it realizes that the media are often good sources of information on areas and situations that an Army unit might encounter in a CONOP. The news media also often offer a perspective valuable because of its variance from military sources.

yielded important lessons that would be reinforced repeatedly over the coming months. EUCOM 2000 was held at the Warrior Preparation Center (WPC) in Kaiserslautern, Germany, one of the U.S. military's premier exercise facilities, which possesses outstanding connectivity to a wide array of global electronic networks. However, when a question arose among EUCOM senior leaders during the seminar as to the number and status of hardened structures within a certain geographic area, BCTP Operations Group Delta reached back to CALL for the answer. Within an hour, using powerful network search engines put into place by CALL, Knowledge-Reachback analysts located a report detailing precisely the information requested, with imagery, and transmitted it to WPC for inclusion in the evening briefing to seminar participants. The important lesson learned was

that although the training staff and BCTP observer-trainers had access to vast networks from which to retrieve information, they were either completely absorbed in the planning and execution of the exercise operation or did not possess the knowledge to obtain the information needed from the electronic resources at their disposal. They needed the help of an extended, knowledge-management-savvy staff to locate critical data.

In March 2000, at the invitation of U.S. Army Europe (USAREUR), CALL and BCTP Operations Group Delta conducted an assessment to determine user needs for CALL's emerging Knowledge-Reachback capabilities. As hoped, the user-needs assessment yielded further lessons learned that had direct applicability to the fielding of Knowledge Reachback. First, the intelligence community,

particularly at Army level, viewed the reachback capabilities being fielded by CALL as duplicative and in direct competition with intelligence systems. Other communities at Army level, such as the operations

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Experience in Bosnia and Kosovo shows that the U.S. Army must also operate decisively and well with armies of nations with whom it has not traditionally enjoyed close relations. Therefore, in December 1999, CALL initiated a relationship with the Partnership for Peace (PfP) Consortium of Defense Academies and Security Studies Institutes.

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and special operations communities, viewed Knowledge Reachback as potentially beneficial to their functions. Corps and division staffs acknowledged that CALL Knowledge Reachback could provide them with critical information they needed on a daily basis. A division G2, even when informed of the negative response by the Army-level intelligence community, responded that he, at the division level, rarely received any information from Army-level intelligence systems.

In July 2000, with the Southern European Task Force exercise Lion Focus 2000, a CALL Knowledge-Reachback analyst was embedded with the deployed team from BCTP Operations Group Delta. This analyst located and retrieved lessons learned, country study, doctrinal, and other information BCTP observer-trainers needed to buttress the validity of their training points or to provide the training audience with information key to the execution of specific staff functions. Connectivity to wide-area networks at some of the training locations was limited and sometimes interrupted. When that occurred, information requests were forwarded to CALL rear Reachback analysts who could perform the research by using more robust network connections. The requested information was then sent to the forward analyst for dissemination to the observer-trainers. Even with fairly primitive modem connectivity, however, the forward-deployed Reachback analyst could obtain large amounts of requested information, proving that staffs operating even in fairly immature environments could interact with existing Knowledge-Reachback Web interfaces.

The CALL and BCTP Operations Group Delta relationship has grown since Lion Focus 2000. A CALL analyst accompanies the operations group on each of the exercises conducted outside of the continental United States. Each exercise adds to the experience of both organizations in using the Knowledge-Reachback capability. CALL continues to expand knowledge and information resources used to support BCTP and the training audience, obtaining access to new databases and new sources of information to populate existing and emerging databases. For example, a Bulgarian medical report on contagious diseases in refugee camps provided key lessons learned to the Third Army staff during exercise Lucky Sentinel.

BCTP Operations Group Delta increasingly relies on Knowledge Reachback to impart validity and credibility to training points made during exercises. More important, however, observer-trainers are increasingly viewing Knowledge Reachback as a resource for the training audience and for skill in using on-line reachback capabilities as a part of the training they offer to staffs. Beginning with the 2001 Lion Focus exercise, BCTP Operations Group Delta began to teach staffs how to directly access network Knowledge-Reachback resources and how to use the CALL Knowledge-Reachback team as a part of its training seminars.

The CALL-USAREUR Knowledge-Reachback Partnership

USAREUR served as a close partner in the CALL Knowledge-Reachback initiative almost from the beginning. Meigs had conceived Knowledge Reachback and the idea of extended staff support to the field across wide-area networks as an integral part of the UAN program that he founded at CALL while serving as CAC commander in 1998. Under Meigs' leadership, USAREUR made great progress in putting together key components of a knowledge system. From 1998 to 1999, the USAREUR deputy chief of staff for operations and plans (DCSOPS) established the Operational Records Preservation (ORP) program. USAREUR founded ORP in response to the lessons learned from the Persian Gulf war, when vast amounts of records were lost during the rapid redeployment of the U.S. Army from Southwest Asia. With ORP, USAREUR DCSOPS required units that deployed to Bosnia and later to Kosovo to preserve certain key records that documented the full spectrum of activities and operations and to retire them to specific electronic and hard-copy repositories. As a corollary to the ORP, the USAREUR lessons learned office catalogued large numbers of documents collected during the first stages of U.S. Army operations in Bosnia by mili-

US Army

A Russian 76th Airborne Division BTR 89 parks next to a U.S. 1st Armored Division Bradley Fighting Vehicle during a joint patrol near Zvornic, Serbia, 29 February 1996.

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The USAREUR lessons learned office, which organizationally fits within the USAREUR office of the deputy chief of staff for operations and plans, became natural partners in Knowledge Reachback to CALL and BCTP Operations Group Delta. Under a memorandum of understand-ing concluded between USAREUR headquarters and the TRADOC Deputy Chief of Staff for Train-ing-West, USAREUR lessons learned analysts serve as the forward-deployed point of entry for infor-mation requests stemming from units deployed to the European theater. USAREUR lessons learned

analysts reach back to capabilities established by CALL on the Internet and SIPRNet to respond to USAREUR-generated requests for informa-tion and periodically forward them to CALL for answers.

In August 2000, USAREUR's 7th Army Training Command (7ATC) provided CALL with start-up funding for Knowledge Reachback. CALL used that funding to hire an additional contracted Knowledge-Reachback analyst to handle requests for information, establish SME networks using col-laborative software technology procured by the CALL Project Office, UAN, and build other web-based on-line information resources tailored to user needs. CALL also procured the hardware and soft-ware needed to establish a website and database presence on the Linked Operations Centers-Europe (LOCE) network. The LOCE allows CALL to

reach U.S. staffs and other personnel operating within NATO headquarters and to make other CALL information and products more readily available to NATO allies.

In October 2000, CALL began integrating Knowledge Reachback with the 7ATC Deployable Operations Group (DOG) initiative. In 1999-2000,

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Lieutenant General Steele instructed CALL and BCTP Operations Group Delta to develop a plan to put Knowledge Reachback into operation in support of U.S. Army forces in the Balkans. Within a month, [they] had devised an operational concept for Knowledge Reachback [and] began using strike force battle staff rock drills and exercises that the Battle Command Battle Laboratory at Fort Leavenworth was testing.

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the 7ATC had established DOG as a focal point to facilitate the training capabilities and resources to U.S. forces deployed to the Balkans. As a forward-thinking organization, DOG considered information and knowledge as a training resource and worked hard to integrate Knowledge Reachback into the operational fabric of the European theater.

In spring 2001, the 7ATC included specific mention of CALL and USAREUR Knowledge-Reachback capabilities in the 180-day and 90-day-out packages it provides to units deploying in support of Stabilization Force and Kosovo Force units. The 7ATC also included information about USAREUR-CALL Knowledge Reachback in an appendix to the operations orders those units received. In a related initiative, USAREUR DCSOPS drafted a letter of instruction directing units within the European theater to take advantage of Knowledge-Reachback on-line capabilities and research assistance.

That the core CALL Knowledge-Reachback team that launched the initiative with USAREUR and the partnership with BCTP Operations Group Delta consists of four analysts is important to note. Three of these analysts have doctorate degrees, two of which are in military history, the third in Slavic languages. Two have Masters of Library Science degrees and extensive experience working in modern research libraries. Two have prior military experience, one being a recently retired lieutenant colonel of ordnance. All have mastered the use of electronic and traditional methods of obtaining needed knowledge and information.

Emerging Capabilities

The trend in U.S. military operations over the last decade indicates that the Army will continue to operate and cooperate with foreign armies. Accordingly, CALL has expanded the scope of its collection and dissemination mission to include collecting and disseminating foreign-generated information and knowledge. In 1998, CALL established a relationship with the American, British, Canadian, and Australian (ABCA) Standardization Program. ABCA is an international-armies program developed to ensure that the partners achieve agreed levels of interoperability and standardization necessary for two or more ABCA armies to operate effectively together within a coalition. The ABCA program approached CALL to develop a coalition operations database of lessons learned that would meet the program's stated objectives. CALL developed a low-cost, low-maintenance variant of existing CALL databases as well as an administrative system through which lessons learned and other reports flowed into the databases from validated sources. The highly successful ABCA database contains over 300 documents.

Great Britain, Australia, and Canada have long been U.S. allies. Strong political, military, and diplomatic ties exist between these countries. However, experience in Bosnia and Kosovo shows that the U.S. Army must also operate decisively and well with armies of nations with whom it has not traditionally enjoyed close relations. Therefore, in December 1999, CALL initiated a relationship with the Partnership for Peace (PfP) Consortium of Defense Academies and Security Studies Institutes. The idea for the consortium had emerged the previous year as part of a bilateral U.S.-German summit meeting, although PfP had existed as a NATO initiative for many years. CALL became associated with the PfP program when it concluded a memorandum of understanding with the Partnership for Peace Information Management System (PIMS).

PIMS looked at CALL's implementation of the ABCA Coalition Operations database and offered to collaborate with CALL to establish and field a similar database for PfP. CALL launched a lessons learned working group at the Second Annual PfP Consortium Conference at Sofia, Bulgaria, in December 1999. Within three months, CALL had fielded a prototype PfP lessons learned database and initiated staffing a user's guide for the database to members of the working group. The prototype was validated at the Third Annual PfP Consortium Conference at Tallinn, Estonia, in June 2000 and again

at a separate meeting of the working group at Fort Leavenworth in November 2000. Beginning in late 2000, CALL began to populate the PfP database with public-access information. In early 2001, CALL began to receive Bulgarian lessons learned for inclusion in the database. The PfP lessons learned database was finally approved at the Fourth Annual PfP Consortium Conference at Moscow in June 2001, where several new PfP countries expressed interest in getting involved with the working group.

In recent years, with CGSC, CALL has also purchased the capability for Army users to access knowledge-management repositories of tremendous importance and applicability to warfighters. The Periscope database contains information on weapons systems in use worldwide; unclassified orders of battle of military establishments across the globe; and a large number of important news and other reports on military topics. The ProQuest and EBSCO periodical databases are also important repositories of military, political, economic, and social knowledge and information of importance to commanders and staffs preparing to deploy to contingency theaters or who are already actively engaged in a CONOP.

The CALL Knowledge-Reachback team is constantly expanding its access to other non-CALL-administered databases. In recent months, the CALL Reachback team has obtained access to numerous logistic databases, including those of the Logistics Support Activity and the Defense Ammunition Center. CALL is also coordinating with Redstone Arsenal to integrate the scientific and technical databases of the materiel community. The UAN project office is also working with the intelligence community on a variety of technology initiatives, such as compiling a document from a variety of multiple sources.

While databases and web-based sources of information are and will remain an important capability within the context of Knowledge Reachback, CALL does not consider them its only ingredient. CALL sees in collaboration software technology the potential for truly interactive means of providing knowledge and information consumers with precisely the information they require. Collaborative software provides users the means to browse, read, write, or publish; that is, users become contributors to the knowledge system. Collaborative computing environments allow users to share ideas and applications remotely.

Collaborative software currently offers four general capabilities: on-line whiteboarding (information posting), audio conferencing, application sharing, and video conferencing. In contrast to standard e-mail that operates in an asynchronous mode, collaborative environments can provide answers to questions that are needed now or "yesterday." They also offer the potential for a remote group of users to produce a quality product derived from the knowledge and work efforts of other users dispersed across the globe. Collaborative environments, therefore, aim to foster productivity and innovation by tapping into the expertise of a diverse, dispersed group of SMEs.

The contracted CALL Knowledge-Reachback analyst took the collaborative Quickplace application, procured by the CALL Project Office-UAN to meet other knowledge-management challenges, and used it to establish a password and an ID-protected website to post response information given to

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Collaborative software provides users the means to browse, read, write, or publish; that is, users become contributors to the knowledge system. Collaborative computing environments allow users to share ideas and applications remotely.

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customers of Knowledge Reachback since its inception in June 1999. The CALL Knowledge-Reachback team also established an informal SME network using the Quickplace application to help it respond to requests for information. The objective goal of Knowledge Reachback and the Warrior Knowledge Network within which it functions is to integrate the training and doctrinal knowledge base with that of the operational Army so cross-fertilization of knowledge and information becomes routine and systematic. This routine interaction will, in turn, ensure that the best possible knowledge and information gets forwarded to the individual user to help surmount everyday challenges encountered in the field or classroom or on the training battlefield.

Although CALL has not yet made widespread use of it, the Lotus Sametime collaborative software provides whiteboard capabilities, improved chat, synchronous application sharing, and improved notification to users to join an on-line meeting. Lotus Sametime carries the promise of immediate delivery to end-users of the knowledge and information product of a group effort.

CALL is also in the process of developing an on-line request for information (RFI) system. The CALL Defense Information Technology Test Bed prototyped the system in late 2000 and early 2001

and is currently adapting the prototype product for operational use. The RFI system allows users of the various CALL websites to submit requests for information electronically.

Unlike a general "e-mail the organization" button that exists on most websites, the RFI system will

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During the assessment, intelligence staffs at Army level charged that Knowledge-Reachback capabilities duplicated those of existing intelligence information systems. . . . Subsequent interviews with operational staffs at corps and division levels and experience in the field . . . demonstrated that units and staffs in the field often do not have access to specialized intelligence systems and applications. Because Knowledge Reachback mostly utilizes the Internet, it is available wherever the Internet is available.

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route requests for information via a CALL RFI manager to appropriate personnel for action. This promises to give the Knowledge-Reachback customer a faster, more expert response, and it will allow CALL to track exactly how much time and effort it expends in providing information and knowledge to the force. The initial pilot testing of the RFI system will include interface with CGSC's Combined Arms Research Library (CARL). This will allow CALL Knowledge-Reachback analysts to obtain rapid assistance from CARL librarians in obtaining needed information in analog or hard-copy formats. This last point, if taken to its logical conclusion in the full implication of an Armywide Knowledge-Reachback system, represents an important breakthrough, since much information and knowledge that field forces need remain in analog, hard-copy formats.

Implications

Two years of operational testing and experience have yielded some key lessons learned regarding the implementation of Knowledge Reachback. In turn, these offer implications as to the effort's future direction. When CALL and BCTP Operations Group Delta conducted the user-needs assessment with USAREUR in March 2000, operational and automation support staffs voiced concern about the effort. During the assessment, intelligence staffs at Army level charged that Knowledge-Reachback capabilities duplicated those of existing intelligence information systems and therefore were unnecessary and unneeded. Subsequent interviews with opera-

tional staffs at corps and division levels and experience in the field alongside the observer-trainers of BCTP Operations Group Delta demonstrated that units and staffs in the field often do not have access to specialized intelligence systems and applications. Because Knowledge Reachback mostly utilizes the Internet, it is available wherever the Internet is available, and the Internet is becoming increasingly available to unit headquarters at the battalion and higher levels, particularly in contingency operational environments.

USAREUR automation staffs voiced concerns about the availability of bandwidth needed to pass large quantities of digital information from repositories based in the continental United States to operational headquarters in-theater. This is a legitimate concern. In the majority of cases, responses to requests for information can be provided to end-users as e-mail attachments, with file transfer protocol being required in rare instances to transmit larger packets. The 2-megabite limit on attachments that generally still exists within most Army e-mail systems remains a limitation, but much of the information currently provided is in the form of electronic text documents where file sizes almost never pose a problem unless embedded graphics are present. And, while Knowledge Reachback is largely a computer network-based activity, it also uses older forms of communication such as telephone, fax, and regular mail.

CALL's experience in responding to requests for information, dating back far beyond the inception of Knowledge Reachback as a formal program, has shown repeatedly that the business of providing knowledge and information to soldiers and leaders is often an interactive process. The simple fact is that requesters often "don't know what they don't know." That is to say, they often initially have a hard time articulating what it is they actually want. This has certainly been the CALL experience with Knowledge Reachback during the first two years of its existence. But while the necessary dialogue to clarify the exact information needs of the requester takes time, it always results in a better and more useful product. There is no apparent technology quick fix to this problem, although improvements in database and network search capabilities continue to make searches against vast electronic repositories more effective in locating precise information. The widespread adoption and use of collaborative software might also facilitate and quicken the pace of dialogue between providers and end users of knowledge and information.

Another limitation of Knowledge Reachback is the primarily doctrinal and academic emphasis of the knowledge resources it accesses. This is a strength and a weakness because it was precisely such information that leaders and units could not readily obtain when deployed on a contingency or collective-training operation. CALL works continually to widen its access to additional information resources and databases to be able to provide a more comprehensive Reachback capability that extends into operational and logistical knowledge resources.

One of the major future challenges of Knowledge Reachback remains user education. Since the mid-1990s, CALL has emphasized making lessons learned available on-line via wide-area computer networks and web-enabled database applications; that is, making its knowledge resources available to Army users who have the computer savvy with which to access them. The computer literacy of Army officers, NCOs, and enlisted personnel has risen dramatically as an increasing percentage of those in the Army were born, have grown up with, and were educated with personal computers. But the range of computer applications at the desktop is still fairly large, and while the advent of Windows and Web browsers has created interface similarities, training in the use of individual pieces of software and database applications remains a requirement.

CALL sees an expansion of its Knowledge-Reachback program to support other BCTP operations groups as the means to meet this continual educational requirement while providing the operational force with a needed knowledge-management capability. BCTP trains and mentors all the Army's division and corps commanders and staffs on a systematic, routine basis. This is an appropriate level at which to make available the Knowledge Reachback capability, since these echelons possess the needed connectivity and automation resources to leverage and exploit it fully. This level is also appropriate for training staff officers and NCOs in the use of web-enabled knowledge and information resources.

Because BCTP observer-controllers and observer-trainers also augment operational staffs in time of war or other operational crises, it seems appropriate for the Knowledge-Reachback capability to be embedded in the training that all BCTP operations groups provide to the Army and in the day-to-day capabilities of operations groups. Since CALL

In the majority of cases, responses to requests for information can be provided to end-users as e-mail attachments, with file transfer protocol being required in rare instances to transmit larger packets. . . . Much of the information currently provided is in the form of electronic text documents where file sizes almost never pose a problem unless embedded graphics are present.

and BCTP report to the TRADOC Assistant Deputy Chief of Staff for Training-West, such integration is possible and highly desirable from an organizational and a functional standpoint. BCTP and the commanders and staffs it trains would receive access to and training in the use of this important operational capability.

Knowledge Reachback currently represents an important knowledge-management capability and training resource. Many challenges lie ahead. If knowledge management is to survive and prosper within the Army, Army leaders must do two things.

First, they must provide coordinated direction and resource support to upgrade the Army's knowledge-management capabilities. Currently, many Army organizations and initiatives have this as their mission, but their efforts are often uncoordinated and sometimes conflicting. Only decisive leadership that ends organizational turf wars will ensure the systematic, intelligent fielding of important knowledge-management capabilities, such as knowledge portals, electronic communities of practice, improved data-mining, multilevel security access, and so on.

Second, Army leaders must be dedicated to expanding training in the use of Information Age innovations. Dedicated research capabilities will be needed in the future, and the fast pace of Information Age operations will demand that those on the ground possess the ability to access on-line information resources quickly and with great skill. If they cannot, Army forces will risk losing information dominance, which doctrine identifies as being the cornerstone of future military success. ***MR***

NOTES

1. GEN Montgomery C. Meigs, "University After Next," *Military Review* (March-April 1998): 37.
2. The CALL Web page can be accessed at <http://call.army.mil>.
3. The CALL SIPRNet site can be accessed at <http://call.army.smil.mil>.

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Winning War a World Away

Colonel Jerry Johnson, U.S. Army, and
Lieutenant Colonel James O. Kievit, U.S. Army, Retired

THE DESTRUCTION OF the Berlin Wall in 1989 marked the end of the Iron Curtain. Most Americans thought they would then live in a safer world. As during the peaceful interludes between World War I and World War II and between World War II and the Korean War, Americans thought the world's major problems had been solved. Even allowing for the Persian Gulf war, action in Somalia, operations in the Balkans, and increasing tensions around the world, most Americans still seemed to view the world as nonthreatening to their way of life. The terrorist attacks on 11 September 2001 were a rude awakening. Once again, events demanded a rapid U.S. military response in multiple environments around the globe.

Vigilant Warriors '02

From 21-26 April 2002, Vigilant Warriors '02, the third Army Transformation wargame, was conducted at the Army War College at Carlisle, Pennsylvania. Set in the newly recognized geostrategic world, the wargame provided clear evidence that the Army's proposed Objective Force would expand the Nation's options for crisis response and conflict resolution in future operational and threat environments. The Objective Force would provide deployable, lethal, effective Army forces (ARFORs) that joint force commanders can use to defend against and defeat future threats to national security. Vigilant Warriors '02, specifically the resolution found in the Caspian scenario, demonstrated the utility of a full-spectrum capability; the importance of strategic and intra-theater lift; and the validity of retaining multiple levels of command and control (C2) to maximize joint force capabilities.

The wargame, set during the years 2019-2020, reflected a world consistent with the Joint Forces Command's (JFCOM's) Joint Vision 2020. The highly complex strategic environment included failing and failed states; increased terrorist and insurgent activities; resurgent radical movements involved with criminal activities, ethnic hatred, and genocide; and the emergence of a major political-military competitor to the United States.

At the beginning of the wargame, the Army found itself "on point for the nation," serving with joint forces in multiple areas around the world. Consequently, the game's design generated several political-military dilemmas around the world at the same time, including the Caspian region, Indonesia, the Balkans, Latin America, Korea, and America. These conflicts stressed the United States' ability to respond and they required full-spectrum capabilities of the proposed Objective Force operating within a joint, multinational, and interagency framework and using the leap-ahead improvements in deployability, sustainability, lethality, agility, survivability, versatility, and responsiveness.

One key game scenario, depicting a major regional war in the Caspian region, portrayed a theater of war in which the fictitious country of Anfar (insurgents, attacking with conventional forces, being supported by Iran) threatens the friendly country of Azerbaijan. Azerbaijan is producing oil for the United States and its allies and is home to thousands of Americans and friendly nationals. The Caspian scenario stretches lines of communication and causes the intervening U.S. force to operate at many levels along the spectrum of war, from humanitarian assistance and peace enforcement through intense, large-scale conventional hostilities in extremely difficult terrain and weather conditions.

Active-duty and retired flag officers from all services played key positions, including regional combatant commanders and joint task force (JTF) commanders for each of the regions. The game's combatant commander was a retired Army four-star general; active-duty two-star generals played the JTF

commander and the joint force land component commander (JFLCC).

The JFLCC had a mixture of Objective Force and legacy units allocated to him, including three Objective Force divisions, one legacy armored heavy division, one legacy armored cavalry regiment (ACR), and a Marine expeditionary brigade that participated during part of the operation. The JTF's complete force allocation included a mixture of joint forces he needed to accomplish the mission (Figure 1).

Objective Force Capabilities

The Objective Force divisions posited improvements in responsiveness, deployability, agility, versatility, lethality, survivability, and sustainability that made them obviously superior to the legacy force and vitally important to the mission, which significantly challenged strategic and operational reach. During the wargame it became clear that future adversaries would find it much more difficult to defend against the more flexible Objective Force. But the Objective Force was important in this scenario not only for the advantages shown during force-on-force combat operations; its value was evident because it excelled at many missions along the spectrum from peace to combat.

One key issue in the wargame was how rapidly the joint force could solve the military aspects of the Caspian crisis. Speed was important because with the world in crisis and the quicker the JTF commander could bring resolution to the Caspian problem, the sooner resources committed to that mission would be available for other hotspots.[1]

Strategic and intra-theater lift proved to be two vital enablers for the Objective Force. Multiple wargames have shown this consistently since Army Chief of Staff General Eric K. Shinseki announced in 1999 that the Army would be transforming to an Objective Force.

Vigilant Warriors '02 included futuristic strategic enablers as well as conventional sealift and airlift platforms. In the Caspian scenario, the game's strategic lift, using a shallow-draft, high-speed ship, had the greatest effect on rapid force closure. The theater support vessel proved essential in one of the game's other scenarios because of its strategic-lift value and its ability to perform operational missions.

For operational maneuver, the game featured two possible future aerial platforms. One was the joint transport rotorcraft (JTR), a large rotary-wing aircraft capable of lifting one future combat system (FCS) vehicle to a range of 500 kilometers (km). The other was the advanced theater transport (ATT), a C-130-size super-short takeoff and landing (750

feet) aircraft with a 3,000-km range, which could lift two FCS vehicles. In the Caspian scenario, these systems provided the intra-theater lift. Their contribution to the Objective Force's flexibility, responsiveness, agility, versatility, lethality, and survivability proved significant.

The Objective Force's advantages, coupled to strategic and operational enablers, proved to be so evident that key leaders in the game asked what might have happened if the JTF had been made up entirely of Objective Forces. They also wondered what would have happened if that total Objective Force JTF had possessed additional intra-theater lift capabilities. Accordingly, although not a part of the original game design, players in the Caspian scenario

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The Caspian scenario stretches lines of communication and causes the intervening U.S. force to operate at many levels along the spectrum of war, from humanitarian assistance and peace enforcement through intense, large-scale conventional hostilities in extremely difficult terrain and weather conditions.

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quickly analyzed two additional vignettes: the JTF Caspian with the intra-theater lift in the original game design but with all Objective Force maneuver units (rather than any legacy units) and the JTF Caspian with both all-Objective Force maneuver units and an increase in intra-theater lift.[2]

The deployment timeline in the original game-design case (see figure 2) shows that the 13th Objective (OBJ) Division (Div) closed at C+8, the 15th OBJ Div closed at C+15, the 54th OBJ Div closed at C+18, and combat operations began at C+26. Two legacy units, the ACR and the legacy division, did not complete full closure until C+39. However, the JFLCC and the JTF commander assessed that they had a correlation of forces high enough to win, and they initiated the attack rather than wait for legacy units to completely close. The legacy units, of course, made significant contributions to the campaign, but they did not provide the flexible advantages that Objective Force units displayed.

Combat operations began not at full closure of all the forces but while legacy units were still flowing in. Legacy units could not flow in as quickly as Objective Force units could. This was not ideal, but the JFLCC could not wait. Once the JFLCC felt he had obtained force ratios capable of defeating the enemy, he began the attack, but at a lower chance for success.

Figure 1. Caspian Scenario Force Allocation

JFMCC
Navy
CVBG
ARG
NCW Forces
Marine
MEB
MEU (SOC)
MPSRON (MPF(F))
Theater
TSC MSSP
HQ, MED COM (Theater)
Medical Bde (EAC)
Army Signal Element
Theater Cmd Avn Bn
ADA Bde
   2 X Patriot Bn
   1 X THAAD Bn
ENCOM (3 Grps/12 Bns)
MI Bde
MP Bde (CS) (6 Bns)
MP Bde (I/R)
Chemical Bde (6 Bns)
Space Element
CID Grp

JFLCC
(Objective Force Corps)
   2 X Obj Div (3 Bdes)
   1 X Obj Div (2 Bdes)
   1 X Legacy Hvy Div (3 Bdes)
   1 X ACR (Legacy) (CONUS)
Corps HQ
Corps Arty HQ
   Fires Bde
EN Bde (5 Grps/14 Bns)
MI Bde
SIG Element
ADA Bde (incl 1 MEAD Bn)
Chemical Bde (5 Bns)
MP Bde (4 Bns)
Air CAV Aslt Bde
AVE Bde (Atk)
AVN Bde (Aslt)
   1 X ESF C
   1 X ESF B
   MEDCOM
   MED Bde
JCMOTE
CA Cmd HQ (-) (RC)
   2 X CA Bde HHC (RC)
   6 X CA Bn (RC)
   1 X CA (FID/Bn) (RC)
   1 X CA Co (AC)

JFACC
   2 X AEFs
AAMBC (Coordination)
JSOTE
Theater SF COM (Fwd)
   2 X SFOG
   6 X OBD w/ Spt & Avn
Ranger Bn
NAVALSW Grp (-)
   2 X SEAL TMs
   2 X NSW Unit Dets
Special Boat Sqdn (-)
   1 X Special Boat Unit
   1 X PC
   1 X ASDS
   1 X SSGN (SOF)
JSOAC
   AF SO Group
   1 X Spec Tactics Sqnd
   1 X SO Wing (ANG) (-)
   1 X SOAV
      1 X SOAB Spt Bn
      UAV
JPOTF
PSYOP GRP HQ (-)
   4 X PSYOPS Bns

Operation Transition to Peackeeping — Forces Required

CJTF Azerbaijan
   HQ–DCG, ASCC, or TSC Cdr
ESF(T)(-) (Group size–2500)
   To support other services
   Re-equip Azeri's
   Support DC's, EPWs, etc.
   Support corps/division redeployment
   EOD support
Engineer Group (3 x Bns–1800)
   Infrastructure repair
   Support CMO
Intelligence (MI Bn–300)

JSOTF (2 Bns–500)
   Train Azeri's
   Continue SR (if needed)
JPOTF (Psyop Bn–300)
   Continue Psyops
JCMOTF (6 x CA Ogs, Bn size–1000)
   Continue CMO
   Limited HA
Aviation Element (500)
   Tactical lift (Bn)
   Atack helos (Co)
Chemical (Bn–400)

TAMD Element (500)
   Early warning
MP Bde (3 x Bns–1800)
   EPW (residual)
   I/R
Medical Bn (300)
   Support to residual force
   Support to EPWs
QRF (750)
   Security response (Bn+)
C4 (500)
   Signal element (EAC Bn+)

Whether to wait for all of the legacy forces to flow in was not the only issue. The JFLCC had to fight somewhat sequentially—some might say piecemeal—at the tactical level because he only had the capability to lift one combat battalion each day, given the distances that air assault units would have to travel to attack. Even to accomplish this, 127 JTRs and 64 ATTs were used. This provided the capability to lift one combat FCS Objective Force battalion. With these assets, bold and aggressive tactics were more successful than they would be today thanks to the Objective Force's increased command, control, communications, computers, intelligence, surveillance, and reconnaissance (C4ISR) capabilities and the posited flexibility advantages and protection of FCS-capable units. In this scenario, the joint force took 86 days to complete its mission (C+86).

The timeline for the first excursion vignette is shown in the light gray portion of figure 2. This ex-cursion looked at what might have happened if the Army combat force consisted entirely of Objective Force units that began attacking sequentially start-ing at C+9 once the first two Objective Force units, the 13th Division and the ACR, closed. Again, this decision to go sequentially, or piecemeal, was made because ARFORs still only had the capability to lift one Objective Force combat battalion each day. In this first additional vignette, players assumed the same intra-theater lift asset availability—127 JTRs and 64 ATTs. Given this situation, the estimate for mission completion was 55 days (C+55).

The medium-gray portion of figure 2 shows the timeline for the second excursion vignette. This is the estimate of results with a total Objective Force flowing in and also an increase in intra-theater lift capability to 544 JTRs and 82 ATTs. Given the distances of travel to air assault objectives, this equates to an increase from one battalion lift per day to one brigade lift per day. This extra intra-theater capabil-

Figure 2. Caspian Intra-theater Lift Comparison
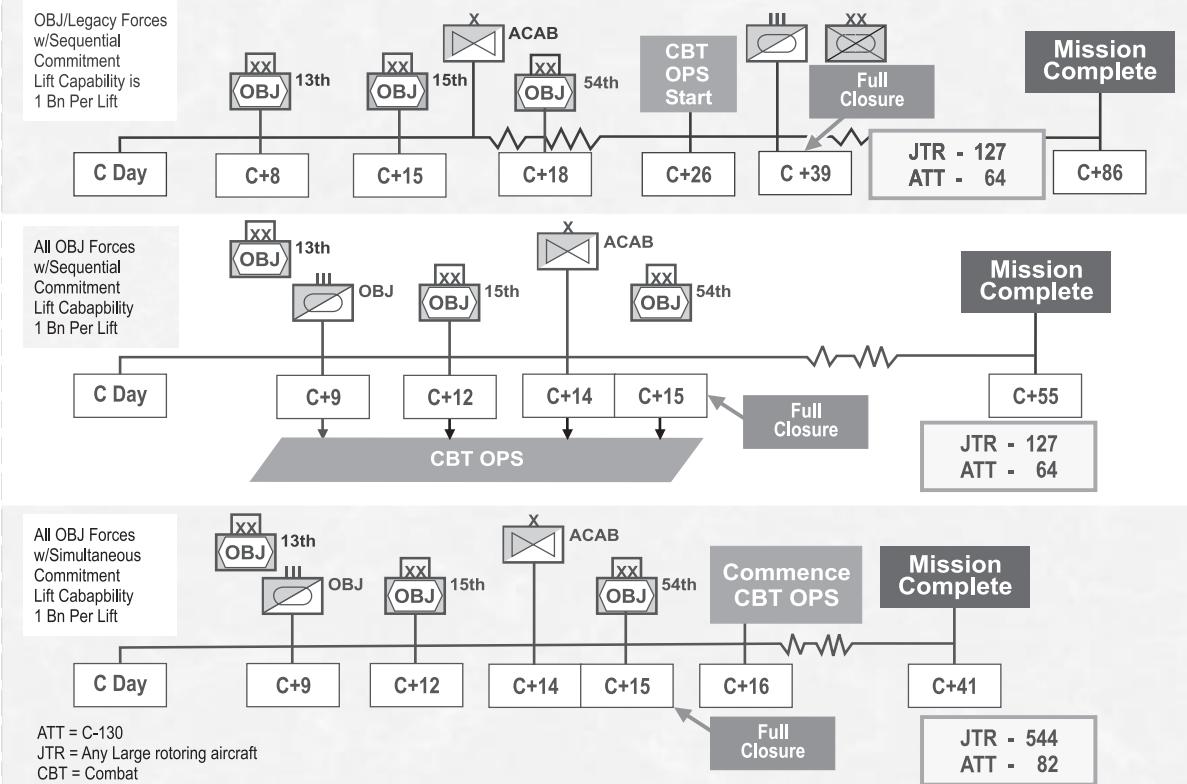
ity gives more agility to the force, increasing its ability to conduct simultaneous attacks. The extra capability would also enable the ground force commander to be much bolder. He could confront the enemy with a force that would quickly overwhelm and defeat the enemy. The JTF commander could leverage this increased capability to attack in a more simultaneous manner across the breadth and depth of the theater immediately after full closure. Analysis predicted that the capability to lift one brigade per day would reduce the time to complete the mission even further, to only 41 days (C+41).

Analysis of the scenario, including the two extra vignettes, confirms operational lift as a critical enabler of Objective Force capabilities. If the force in the Caspian scenario would have had more Objective Force units enabled by additional JTRs and ATTs, the campaign could have been finished in less than half the time.[3] The key consideration is the correct mix of forces and enablers.

Of course there is a cost to creating additional enhanced capability forces and lift assets. To determine their true value, therefore, one must consider the cost in days of combat operations versus the cost overall to the Nation to produce such a capable force. Would it cost the Nation more to procure the

The JFLCC had a mixture of Objective Force and legacy units allocated to him, including three Objective Force divisions, one legacy armored heavy division, one legacy armored cavalry regiment, and a Marine expeditionary brigade that participated during part of the operation.

extra lift or to extend the campaign from 41 days of intense combat to 86 days? A longer campaign length almost certainly makes it much more expensive in terms of logistics and lives.

Considering the effect of American lives lost is especially important. From a training standpoint, the Battle of Kasserine Pass in North Africa collected a toll in lives in payment for being ill prepared. The destruction of Task Force Smith in Korea collected a toll for unpreparedness from an equipment and materiel perspective. Even Operations Desert Shield and Desert Storm took a toll, albeit smaller, for inadequate identification-friend-or-foe preparedness. Clearly, being ill prepared for the next war, regardless of the specific nature of that unpreparedness, costs precious lives.

Americans are willing to accept casualties in defense of national interests, but the possibility of paying such a price needlessly through unpreparedness is unacceptable and supports the need to invest now in developing, fielding, and training flexible, adaptable, full-spectrum-capable military forces.

Implications for Command Echelons

The Caspian scenario clearly demonstrated that synchronization and management complexities of warfare in the future threat environment strongly support the need for multiple and flexible levels of C2 to maximize the future joint force's capabilities. Command and control and seamless integration of joint and coalition operations in a vastly expanded, noncontiguous battlespace were multifaceted and had an increased need for seamless integration of simultaneous air-ground operations.

Even though the Army has yet to define all levels of command resident within the Objective Force, draft Objective Force concepts, as used in Vigilant

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US Army

A 20th Infantry Regiment Stryker at the Yakima Training Center, Washington.

Warriors '02, employ a functional framework in which units of employment (UE) perform tasks currently assigned to divisions and higher Army headquarters. UE link ground and joint forces and orchestrate ground operations that decide joint campaigns. UE are the basis of combined arms air-ground task forces, and they have the capacity to assume command of JTFs. They resource and execute combat operations; designate objectives; coordinate with multiservice, interagency, multinational, and nongovernment activities; and employ long-range fires, aviation, and sustainment while providing C4ISR and tactical direction to the next lower echelon—units of action (UA).

UA are the tactical warfighting echelons of the Objective Force and are similar to brigades and battalions. Maneuver UAs are the smallest combined arms units committed independently. Objective Force UA can initiate decisive combat at a chosen time and place. They continue to develop the situation in contact and to integrate maneuver; fires; reconnaissance, surveillance, and target acquisition (RSTA); and the layered and integrated network of information and communication capabilities.

The brigade, as the highest level of UA command and control in Vigilant Warriors '02, assigned missions; shaped actions beyond and between battalion engagements; integrated external intelligence, organic RSTA assets, and long-range fires; filled gaps in battalion capabilities; and set conditions for tactical success. During the decisive-operations phase of the Caspian scenario, the Objective Force brigade's value was clear when it directed the continuous integration of small, powerful tactical units moving along multiple, noncontinuous axes to objective areas while simultaneously engaging the adversary with organic, overmatching, and precise supporting fires. Combined with the joint force's other capabilities, these actions led to the defeat and disintegration of enemy forces.

In a fighting force, the C2 headquarters processes intelligence and combat information and directs operations that maximize a combat unit's killing capabilities. Detailed planning and execution accomplish this, and the devil is in those details. Reducing a C2 headquarters' analytical and planning power when the goal is coordinating and synchronizing operations does not make sense. Using information technology to streamline operations, share information, and plan and execute collaboratively maximizes Army headquarters elements' capabilities in the field. However, Vigilant Warriors '02 shows that there is a natural division

The USAV *Spearhead*, a U.S. Army theater support vessel, arrives at a port in the Central Command area of operations, 27 January 2003.

In the Caspian scenario, the game's strategic lift, using a shallow-draft, high-speed ship, had the greatest effect on rapid force closure. The theater support vessel proved essential in one of the game's other scenarios because of its strategic-lift value and its ability to perform operational missions. . . . The game featured two possible future aerial platforms. One was the joint transport rotorcraft (JTR), a large rotary-wing aircraft capable of lifting one future combat system (FCS) vehicle to a range of 500 km. The other was the advanced theater transport (ATT), a C-130-size super-short takeoff and landing aircraft [that] could lift two FCS vehicles.

of labor for multiple levels of Army UE echelons.

The Army Service Component Command (ASCC) (often designated as a numbered Army) performs missions vital to the combatant commander. The ASCC provides a regionally focused headquarters that is able to execute many functions, from supporting security cooperation in peacetime to forming the core element of a JTF in war.

The ASCC commander can also act as the JFLCC. If there are multiple corps in an operation, then the choice of the ASCC as the JFLCC headquarters is more appropriate. In this wargame, where there was only a single Army corps directing subordinate units, the corps commander acted as the JFLCC.

The ASCC normally performs many theater-strategic functions often grouped together under the title of Army Support to Other Services. These functions include ground-based air defense; theater-level logistics; nuclear, biological, and chemical (NBC) detection and decontamination; joint rear area security; and other responsibilities, depending on the situation and threat.

Normally, the goal of combat operations is to tran-

sition from warfighting to peace-enforcement and finally back to peace. During times of transition, particularly when the operation is changing from a U.S.-led coalition combat operation to a multinational or international peace-enforcement operation, the ASCC is the natural headquarters to oversee transition operations.

Retaining a major headquarters is a necessity because of the estimated force requirement for 11,000 soldiers and even more so to satisfy the requirement to coordinate with multiple coalition partners. The transition phase is an important part of any operation, and if not done properly, the United States can find itself mired in a situation from which it might not be able to extract itself for years or even decades. The major advantage in the game of keeping C2 at the ASCC level was that it freed up corps and division UEs to re-deploy rapidly to fight in other theaters of war.

When the corps acts as a UE, it has many valuable capabilities. Although the corps staff as designed today does not usually have the breadth or depth to maintain the overall regional focus required of an ASCC while also training and preparing for its

An Abrams tank struck by a depleted uranium round is roped off with yellow tape and a radiation containment marking, March 1991.

Considering the effect of American lives lost is especially important. From a training standpoint, the Battle of Kasserine Pass in North Africa collected a toll in lives in payment for being ill prepared. The destruction of Task Force Smith in Korea collected a toll for unpreparedness from an equipment and materiel perspective. Even Operations Desert Shield and Desert Storm took a toll, albeit smaller, for inadequate identification-friend-or-foe preparedness.

wartime contingencies, it does possess sufficient abilities to perform as a JTF, JFLCC, or an ARFOR headquarters, depending on mission requirements. A corps-level UE is the primary integrator of U.S. and multinational multidiemnsional operational and tactical capabilities in combined and joint campaigns. It enables and shapes subordinate air-ground task force operations and sustains as well as provides full-dimensional protection for mission-tailored units.

One question came up during the wargame: "If the ASCC no longer existed as a C2 headquarters, what effect would that have on V Corps?" Most likely, the corps UE commander and staff would be encumbered by serving in four roles simultaneously: as the regional Army headquarters for the U.S. Army's European Command's area of responsibility; as the coalition JTF for unified operations in the Caspian joint operational area; as the combined or JFLCC for conducting land operations; and as the ARFOR for administrative C2 support of all Army units. The corps commander and staff would likely reach mission overload, and the combat engagement or management focus would be diluted.

In the Caspian scenario, however, there was an ASCC UE. An active-duty major general (MG) portrayed the ASCC commander and as such was appointed by the combatant commander to be the Caspian JTF commander. The ASCC commander's

focus on the conduct and support of the overall campaign freed the corps commander to focus attention on obtaining maximum effect from and during ground operations fully integrated within the overall combined and joint application of military power.

A division UE has many of the same capabilities as the corps UE, but on a smaller scale. In a smaller scale contingency, the division UE can function as a JTF, JFLCC, or ARFOR. The division UE's primary function is as the execution echelon for decisive operations in major combat operations in a major theater of war. When tailored with capabilities depending on the situation and the threat (for example, additional air defense elements, field artillery brigades, and attack and lift helicopters), as it was in the Caspian scenario, a division UE can also enable and shape subordinate UA operations.

A debate continues in the Department of Defense whether functions in some Army headquarters are redundant and whether spaces or even complete headquarters echelons can go away. Vigilant Warriors '02 provides strong support for the Army's keeping all currently planned UE-level C2 headquarters. Players accepted that there is a need to examine further the exact composition of each of those echelons, but they clearly believe that robust capability at each level should be retained.

Advantages

Vigilant Warriors '02 is perhaps the most comprehensive look yet at what Army Transformation and the Objective Force can contribute to the defense of the Nation. The game unmistakably demonstrated the strategic utility of an Objective Force capable of full-spectrum dominance. The Caspian scenario particularly highlighted the strategic and operational maneuver advantages of Objective Force elements as well as the importance of adequate availability of strategic and operational lift enablers.

Vigilant Warriors '02 also verified the advantages provided the joint force by multiple levels of Army C2 structures such as the current ASCC, corps, division, and brigade headquarters. The Army provides certain unique functions and capabilities to the joint force, regardless of theater. A regionally focused command, the ASCC can best provide theaterwide leadership for ground warfighting functions and for warfighting support activities such as theater-level logistics; support to displaced citizens; and control and support of enemy prisoners of war. Furthermore, the ASCC's staff has greater breadth and depth to plan for and control humanitarian assistance; infrastructure repair; explosive ordinance and demolitions support; civil-military operations; training allies through the foreign internal defense programs of apportioned Army special forces units; psychological operations; ground-based air defense early warning and defense forces; signal support; chemical and biological detection and decontamination; intelligence activities; medical support; military police support; and the employment of ground and heliborne rapid reaction forces.

Vigilant Warriors '02 demonstrated that the existing multiple echelons of C2 (ASCC, corps, division, brigade, and so on) give the Army a flexible, adaptive capability to react to demands for battle and sustainment leadership and management in an international security environment that will only become

> *Draft Objective Force concepts, as used in Vigilant Warriors '02, employ a functional framework in which units of employment (UE) perform tasks currently assigned to divisions and higher Army headquarters. UE link ground and joint forces and orchestrate ground operations that decide joint campaigns. . . . Units of action (UA) are the tactical warfighting echelons of the Objective Force and are similar to brigades and battalions. Maneuver UAs are the smallest combined arms units committed independently. Objective Force UA can initiate decisive combat at a chosen time and place.*

more complex. Eliminating any one of the C2 levels at the UE level would complicate immensely the missions of the remaining command echelons and make the Army less flexible and responsive to the needs of national security. Any thoughtful discussion of this issue must begin by recognizing that the functions themselves would not go away. Instead, they would have to be absorbed at another level, and every level already has its own major functions to perform.

While additional analyses remain to be conducted, Vigilant Warriors '02 showed manifestly that Army Transformation is on the right path in pursuing Objective Force capabilities. To respond rapidly and effectively when called on by the Nation, the Army must continue to aggressively pursue its Transformation campaign and the Objective Force. As part of that effort, future Army Transformation wargames can serve as vital venues producing insight into how to sustain and improve the Army's capabilities; demonstrate its inescapable strategic relevance; and ensure that the Army retains its position as the premier ground force in the world. **MR**

NOTES

1. This situation is similar to the Europe First strategy adopted during World War II whereby forces were to hold in the Pacific while the United States defeated Axis forces in Europe as quickly as possible to be followed by defeat of the Japanese in the Pacific.
2. There was no change to strategic-lift availability for these excursions. Available strategic lift was constant across all cases.
3. COL John Bonin points out an additional aspect, one that was not well discussed during the game itself; that is, who provides JTRs and ATTs? While it might

be assumed the Air Force would provide ATTs, it is likely that the Army would need to procure JTRs. To provide the design case (127 JTRs) for the scenario at an operations readiness (OR) rate of 90 percent would require a theater aviation transport group of 144 JTRs. The increased lift excursion (544 JTRs) would require a theater aviation transport brigade of four groups of 144 each JTRs (or 576 total at 94.4 percent OR). Also, this number of aircraft would require substantial, dedicated logistic support.

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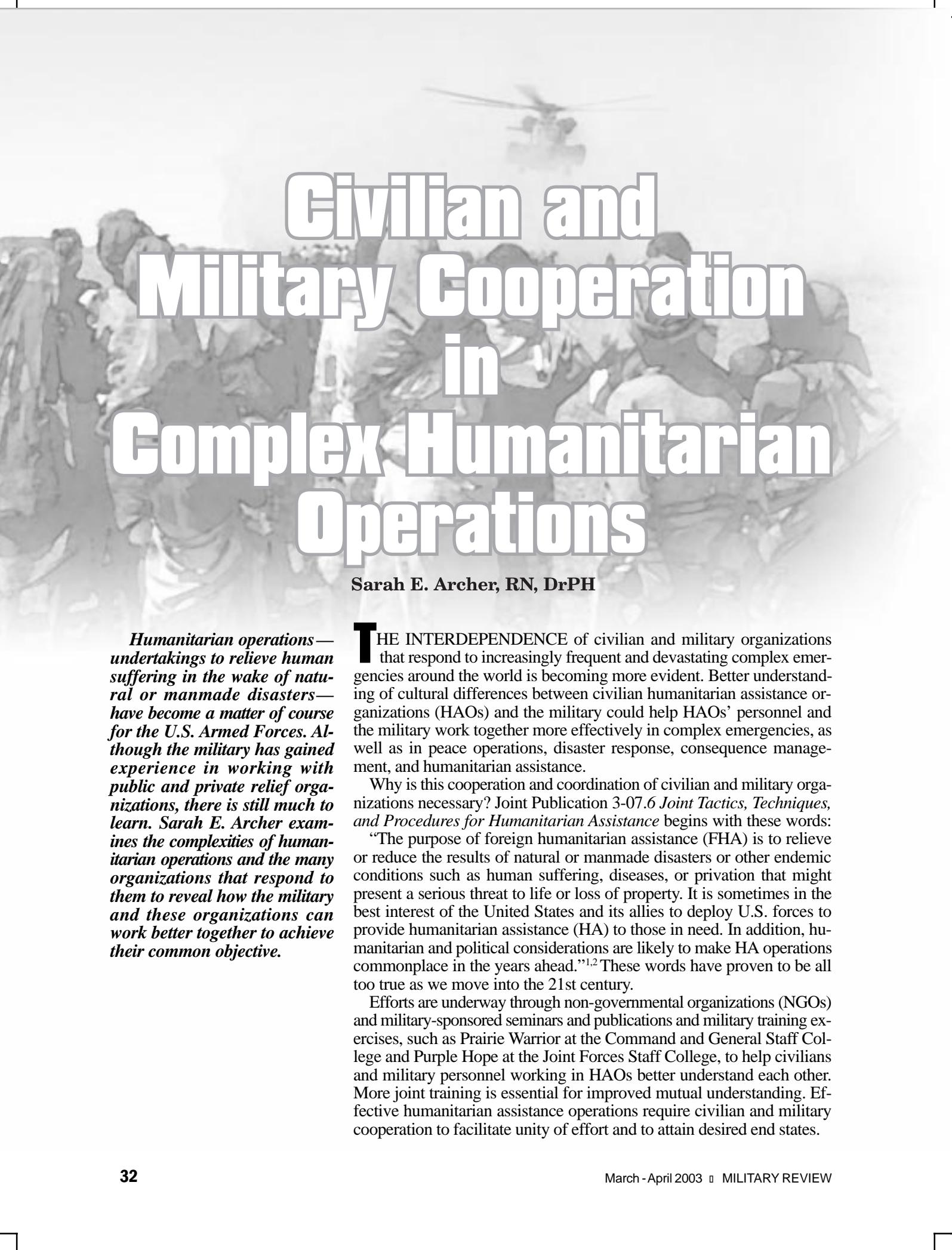
Civilian and Military Cooperation in Complex Humanitarian Operations

Sarah E. Archer, RN, DrPH

Humanitarian operations— undertakings to relieve human suffering in the wake of natural or manmade disasters— have become a matter of course for the U.S. Armed Forces. Although the military has gained experience in working with public and private relief organizations, there is still much to learn. Sarah E. Archer examines the complexities of humanitarian operations and the many organizations that respond to them to reveal how the military and these organizations can work better together to achieve their common objective.

THE INTERDEPENDENCE of civilian and military organizations that respond to increasingly frequent and devastating complex emergencies around the world is becoming more evident. Better understanding of cultural differences between civilian humanitarian assistance organizations (HAOs) and the military could help HAOs' personnel and the military work together more effectively in complex emergencies, as well as in peace operations, disaster response, consequence management, and humanitarian assistance.

Why is this cooperation and coordination of civilian and military organizations necessary? Joint Publication 3-07.6 *Joint Tactics, Techniques, and Procedures for Humanitarian Assistance* begins with these words:

"The purpose of foreign humanitarian assistance (FHA) is to relieve or reduce the results of natural or manmade disasters or other endemic conditions such as human suffering, diseases, or privation that might present a serious threat to life or loss of property. It is sometimes in the best interest of the United States and its allies to deploy U.S. forces to provide humanitarian assistance (HA) to those in need. In addition, humanitarian and political considerations are likely to make HA operations commonplace in the years ahead."[1,2] These words have proven to be all too true as we move into the 21st century.

Efforts are underway through non-governmental organizations (NGOs) and military-sponsored seminars and publications and military training exercises, such as Prairie Warrior at the Command and General Staff College and Purple Hope at the Joint Forces Staff College, to help civilians and military personnel working in HAOs better understand each other. More joint training is essential for improved mutual understanding. Effective humanitarian assistance operations require civilian and military cooperation to facilitate unity of effort and to attain desired end states.

Dana Priest, author of *The Mission: Waging War and Keeping Peace with America's Military*, stated, "As the U.S. Army's experience in Kosovo shows, the mind-set, decision-making and training of infantry soldiers rarely mixes well with the disorder inherent in civil society. This mismatch of culture and mission can distort the goal of rebuilding a country."[3] This is a lesson that we all must remember in the rebuilding of Iraq.

General John M. Shalikashvili, then Chairman of the U.S. Joint Chiefs of Staff, recognized the need for good cooperation when he said, "What's the relationship between a just arrived military force and the NGO and PVO that might have been working in a crisis-torn area all along? What we have is a partnership. If you are successful, they are successful; and, if they are successful, you are successful. We need each other."[4]

Complex Emergencies

Complex emergencies are defined by the March 2003 UN *Guidelines on the Use of Military And Civilian Defence Assets to Support UN Humanitarian Activities in Complex Emergencies* as "a humanitarian crisis in a country, region or society where there is total or considerable breakdown of authority resulting from internal or external conflict and which requires an international response that goes beyond the mandate or capacity of any single and/or ongoing UN country programme."[5] Complex emergencies have become much more frequent since the end of the Cold War. They share additional troubling characteristics, including—

 Reappearance of nationalistic, territorial, religious, or ethnic ambitions or frictions such as occurred in the former Yugoslavia and are predicted in Iraq.

 Mass population movements as people are internally displaced or become refugees in another country while searching for security, food, water, and other essentials.

 Severe disruption of the economic system and destruction of vital infrastructure.

 General decline in food security resulting from political decisions, discriminatory policies, food shortages, disruption of agriculture, droughts, floods, inflation, and lack of finances. Malnutrition can ensue quickly in local areas and may degenerate into widespread starvation.[6]

Humanitarian crises can result from a combination of manmade and natural disasters, such as large numbers of people experiencing droughts, cyclones, crop failures, or floods even as they are engulfed in civil war, are invaded, or as their governments fail. Recent complex emergencies have occurred in Afghanistan, Colombia, Democratic Republic of Congo, Ethiopia, Indonesia, Iraq, the Philippines, southern Africa, and Sudan. Natural disasters alone can overwhelm the resources of already severely stressed governments, with sadly predictable effects on the people. The earthquakes in Central Asia and Hurricane Mitch are examples.

Humanitarian Assistance Organizations

"Humanitarian assistance organization" (HAOs) is used here as a collective term that includes intergovernmental organizations (IGOs), nongovernmental humanitarian agencies (NGHAs), and NGOs involved in providing humanitarian assistance in complex emergencies and disasters. These are the definitions of humanitarian organizations used by the Sphere Project.[7,8] IGO replaces the previously used international organization (IO) because of confusion with the military's acronym for information operations (IO).

Because NGOs often compete with each other for scarce resources, coordination among NGOs might not appear optimal from a military point of view. NGOs are independent organizations and have their own agendas and constituencies. However, all recognize that collaboration is the best way to assist the people whom they serve. Effective communication and collaboration among civilian humanitarian organizations and between civilian and military organizations is essential.

NGHAs are the International Committee of the Red Cross (ICRC) and the International Federation of Red Cross and Red Crescent Societies (IFRC). The ICRC, a unique humanitarian organization based in Geneva, is the civilian organization designated in the 1949 Geneva Conventions to ensure that prisoners of war and civilians in war are treated in accordance with international humanitarian law.

The International Federation of Red Cross and Red Crescent Societies (IFRC), also headquartered in Geneva, has 178 national Red Cross or Red Crescent Society affiliates, one of which is the American Red Cross (ARC). The ARC responds to local, national, and international disasters; provides support for military personnel and their families; and offers extensive training opportunities in disaster assistance, shelter management, mass feeding, damage assessment, first aid, cardiopulmonary resuscitation, and mother and baby care.

The March 2003 UN guidelines defines humanitarian assistance as "aid to an affected population that seeks, as its primary purpose, to save lives and alleviate suffering of a crisis-affected population. Humanitarian assistance must be provided in accordance with the basic humanitarian principles of humanity, impartiality, and neutrality."[9]

The United Nations Office of the Coordinator for Humanitarian Affairs (OCHA) or the United Nations High Commissioner for Refugees (UNHCR) is often chosen as the lead agency to assist and coordinate HAOs' planning and operations in the complex emergency.

UNHCR is the organization charged with the responsibility for refugees and internally displaced persons (IDPs). In JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*, the term *refugee* is defined as "a person who, by reason of real or imagined danger, has left their home country or country of nationality and is unwilling or unable to return."[10] IDPs are defined in the same JP as "any person who has left their residence by reason of real or imagined danger but has not left the territory of their own country."[11]

These definitions in JP 3-07.6 have changed from previous U.S. military definitions of refugees and IDPs. These revised and internationally accepted definitions will also appear in the next edition of JP 1-02. Because of the Dayton Accords or General Framework Agreement for Peace (GFAP) in Bosnia and Herzegovina, the U.S. military has begun to use the acronym DPRE for displaced persons, refugees, and evacuees.

The United Nations High Commissioner for Human Rights (UNHCHR) was created in 1994 to provide human rights monitors to investigate and to prevent abuses of human rights; to support UN Special Prosecutors by collecting and verifying evidence of crimes against humanity; to provide education about international human rights law and practice; and to support host countries in administering justice.

The United Nations Children's Fund (UNICEF) provides long-term expert consultation and material support in collaboration with the host government and key host country nationals for projects to strengthen health and medical services, especially for children and women; water purification and distribution; and sanitation.

The World Food Program (WFP) obtains, transports, and stockpiles food. Direct assistance, the face-to-face distribution of WFP food at household or camp level, is done by NGOs or other civilian organizations.

The World Health Organization (WHO) is the UN agency charged with promoting and protecting the health of the world's population. WHO's Department of Emergency and Humanitarian Action responds to complex emergencies and natural disasters.

Humanitarian crises can result from a combination of manmade and natural disasters, such as large numbers of people experiencing droughts, cyclones, crop failures, or floods even as they are engulfed in civil war, are invaded, or as their governments fail.

An Albanian man signs for the delivery of building materials supplied by CARE, Jezerc, Kosovo, 22 September 1999.

US Army

International NGOs that are based in more than one country include CARE International, International Save the Children Alliance, and Medicins Sans Frontieres. CARE International, one of the largest and most effective NGOs in the world . . . [with] programs in 60 countries in Africa, Asia, Latin America, and Eastern Europe.

NGOs are "organizations, both national and international, which are constituted separately from the government of the country in which they are founded."[12] NGOs are not aligned with any government. Many employ host country nationals as well as personnel from other countries and so are international themselves.

Every NGO is accountable to its donor constituency and headquarters personnel, who establish the NGO's priorities and fund the programs the NGO undertakes in cooperation with the host country's government. To ensure the principles of humanity, impartiality, and neutrality, and to maintain their independence, many NGOs avoid contact with and might show hostility toward military personnel in times of war.

International NGOs that are based in more than one country include CARE International, International Save the Children Alliance, and Medicins Sans Frontieres (MSF). CARE International, one of the largest and most effective NGOs in the world, has its Secretariat in Brussels, Belgium, and has 11 independently registered and governed member organizations in Australia, Canada, Denmark, France, Germany, Japan, the Netherlands, Norway, Austria, the United Kingdom, and the United States. CARE has programs in 60 countries in Africa, Asia, Latin America, and Eastern Europe. CARE's development assistance projects focus on agriculture and natural resources; education, particularly female literacy; emergency assistance; health; nutrition; small economic activity development; and water, sanitation, and environmental health.[13]

There are many kinds of NGOs. Faith-based organizations might be international, national, or local, and are sponsored by religious groups and their affiliates. Examples include the Adventist Development and Assistance Agency International (ADRA), Catholic Relief Services (CRS), Church World Services (CWS), International Islamic Relief Organization, and World Vision International (WV).

Some national NGOs that are based in one country provide assistance only in that country or even in one community. National NGOs vary in size from a family-run organization functioning in a local area, or a religious group serving its local community. The development of national NGOs is a sign of developing civil society, especially in countries of the former Soviet Union.

More than 30,000 HAOs are at work in the world today. HAOs are financed by private individual or group donations, foundation grants, and

government contracts. HAOs are accountable to their donors for program activities. HAOs provide technical and materiel development projects and humanitarian assistance, in cooperation with the host nation government and private groups. HAOs are active in most countries long before a complex emergency occurs, remain active throughout the complex emergency when it is safe to do so, and continue to serve the people long after the complex emergency ends. HAO activities are thrust upon the world's consciousness when the CNN syndrome brings HAO representatives into high media focus. Some NGOs, such as Medecins Sans Frontieres, which was awarded the 1999 Nobel Peace Prize, and the International Rescue Committee (IRC), specialize in disaster and assistance operations. Others, such as Amnesty International and Human Rights Watch, focus on human rights violations.

Three consortia coordinate numerous NGO activities. Organizations whose mission is to assist HAOs with coordination of activities include the American Council for Voluntary International Action, known as InterAction. InterAction is a coalition of more than 160 primarily U.S.-based assistance, development, and relief organizations. InterAction has developed standards addressing governance, organizational integrity, communications to the U.S. public, finances, management practice, human resources, program, public policy, and implementation.[14] Another coordinating organization is the International Council of Voluntary Agencies (ICVA). This is a global network of human rights, humanitarian, and development NGOs that focuses its information exchange and advocacy efforts primarily on humanitarian affairs and refugee issues."[15] Both of these organizations work with the Standing Committee for Humanitarian Response in the Sphere Project, which since 1997 has developed and modified minimum standards in the vital areas of humanitarian assistance: water supply and sanitation, nutrition, food aid, shelter and site planning, and health services.[16]

Multinational/multilateral organizations that fund IGO and NGO activities include the European Union (EU), the Asian Development Bank (ADB), the Organization for Security and Cooperation in Europe (OSCE); the African Union (AU); and the Association of South East Asian Nations (ASEAN).

Bilateral governmental organizations provide development and emergency assistance to other countries either directly government-to-government or through UN agencies and NGOs. These organizations include the U.S. Agency for International Development (USAID); the United Kingdom's Department for International Development (DFID); the Canadian International Development Agency (CIDA); and the Swedish International Development Agency (SIDA). IGOs, NGHAs, NGOs, and multi- or bilateral government donor agencies are lumped together as the International Community (IC).

HAO Values and Standards

Although IOs and NGOs have many differences in organization, funding constituencies, and methods of operation, they generally adhere to the Code of Conduct the International Committee of the Red Cross and Red Crescent Movement and NGOs in Disaster Assistance adopted in 2001. The code states that—

"1. The humanitarian imperative comes first. The prime motivation of our response to disaster is to alleviate human suffering.

2. Aid is given regardless of the race, creed, or nationality of the recipients and without adverse distinction of any kind. Aid priorities are calculated solely on the basis of need.

IDPs cross from Kosovo to Muhovac, Serbia, at a checkpoint manned by U.S. and Yugoslav soldiers, 24 May 2001.

US Army

3. Aid will not be used to further a particular political or religious standpoint.

4. HAOs shall endeavor not to act as instruments of government foreign policy. In order to protect our independence, HAOs will seek to avoid dependence upon a single funding source.

5. HAOs shall respect culture and custom.

6. HAOs shall attempt to build disaster response on local capacities. Where possible, HAOs will strengthen these capacities by employing local staff, purchasing local materials, and trading with local companies.

7. Ways shall be found to involve program beneficiaries in the management of assistance aid. Effective assistance and lasting rehabilitation can best be achieved where the intended beneficiaries are involved in the design, management, and implementation of the assistance program.

8. Assistance aid must strive to reduce future vulnerabilities to disaster as well as meeting basic needs.

9. HAOs hold themselves accountable to both those they seek to assist and those from whom they accept resources.

10. In our information, publicity, and advertising activities, we shall recognize disaster victims as dignified humans, not hopeless objects."[17]

During the development of a complex emergency, HAOs continue working in the affected locale. Many HAO personnel have been in country for years, speak local languages, understand cultural and religious practices, and have earned the people's trust. In times of relative political and environmental stability, HAO programs focus on microeconomic development and strengthening the agricultural, education, health, and industrial sectors to bring about improved and sustainable standards of living.

As conditions that lead to a complex emergency evolve, HAOs in country must shift the emphasis of their programs to address the developing and inevitable humanitarian crisis. Some HAO personnel, especially national personnel, will remain in the country or countries experiencing the complex emergency. As the security situation deteriorates, most expatriate HAO personnel leave, often going to neighboring countries to facilitate their timely return when it is safe. When assurance of security for personnel and supplies is given by the military, HAO personnel arrive to provide emergency humanitarian relief: food, water, shelter, medical

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care, counseling, and clothing. HAOs continue working in the country long after the emergency has ended, order has been restored, and the military who were sent to help have departed. In the reconstruction period following the complex emergency, HAO program activities gradually shift from providing relief to focusing on development.

Civil-Military   Coordination

An effective coordinated effort between civilian agencies and the military in complex emergencies is essential. During the complex emergency and immediately afterwards, the security situation may be so volatile that military personnel will have to provide emergency humanitarian assistance to civilians. Even in these dire circumstances, civilian-military interdependence is necessary. The military's primary responsibility is to establish and maintain a safe and stable environment. Once this is accomplished, civilian humanitarian personnel can assist the affected population by meeting their essential needs and by helping to rebuild their society. These specialized roles of civilian humanitarian and military personnel, although clearly different, are absolutely interdependent.

The *Guidelines* issued by the United Nations on 20 March 2003, include the following key concepts:

"iii. A humanitarian operation using military assets must retain its civilian nature and character, while military assets will remain under military control. The operation as a whole must remain under the overall authority and control of the responsible humanitarian organization. This does not infer any civilian command and control over military assets.

"iv. Humanitarian works should be performed by humanitarian organizations. Insofar as military organizations have a role to play in supporting humanitarian work, it should be to the extent possible, not encompass direct assistance, in order to retain a clear distinction between the normal functions and roles of military stakeholders."[18] Direct assistance is the face-to-face distribution of goods and services. Military assistance and support are often essential in indirect assistance which does not interface with the population served and consists of such activities as transport of humanitarian goods or relief personnel, and infrastructure support such as road repairs, airspace management, and power generation.[19]

The differentiation of civilian humanitarian and military roles during and after a complex emergency is essential for a number of reasons. The military is an instrument of its nation's foreign policy. As Priest describes, this is increasingly the case for the U.S. military.[20] HAOs are not and must not be mistaken to be instruments of any nation's foreign policy. Their guiding principles are humanity, impartiality, and neutrality.

This role differentiation is made explicit in the [*General guidance for interaction between United Nations personnel and military actors in the context of the crisis in Iraq]* issued by the UN Office for the Coordination of Humanitarian Assistance (OCHA) issued on 21 March 2003:

"Recent conflicts have shown that coordination between humanitarian and military actors, particularly in the early phase of a conflict, can be essential for the timely and effective delivery of humanitarian assistance and to help ensure the protection of civilians. . . . While interaction between civil and military actors on the ground is both a reality and a necessity, it is important to emphasize the constraints and limitations of civilian organizations in this respect. A perception of adherence to key humanitarian principles of humanity, neutrality and impartiality is of immediate practical relevance for humanitarian workers on the ground, e.g., in ensuring safe and secure operations, obtaining access across combat

US Navy
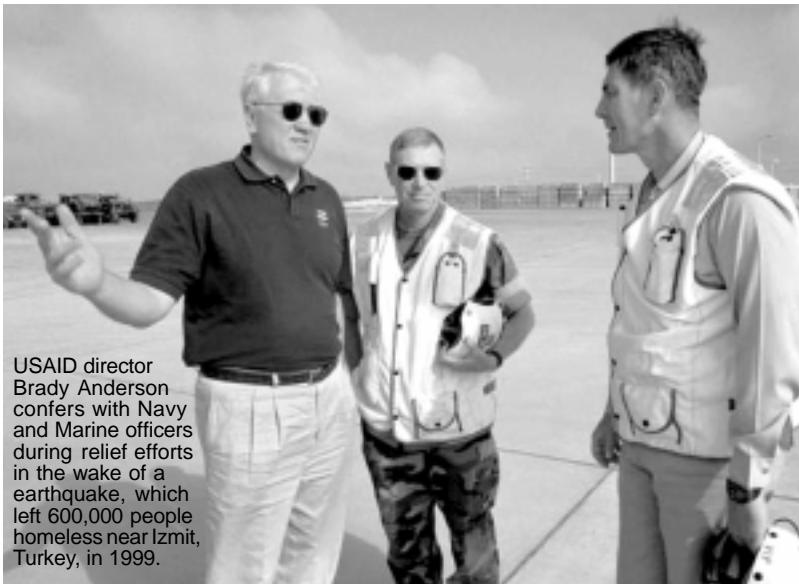
USAID director Brady Anderson confers with Navy and Marine officers during relief efforts in the wake of a earthquake, which left 600,000 people homeless near Izmit, Turkey, in 1999.

lines, and being able to guarantee equitable aid distribution to all vulnerable populations. Therefore, it is essential that there be maximum certainty and clarity for UN personnel involved in daily contacts or liaison arrangements with military forces operating in Iraq. As provided for in his terms of reference, the Humanitarian Coordinator for Iraq, (HC), who is also the Designated Official (DO), will oversee all liaison with military forces."[21]

Thus, the civilian humanitarian point of contact (POC) for military units in Iraq is clearly designated.

Recent military deployments in Kosovo, East Timor, Afghanistan, and Iraq underscore the importance of the military's enormous planning, communications, security, and logistic capabilities to provide support for civilian humanitarian assistance efforts. Military units continue to support local governments, civil agencies, UN agencies, IGOs, NGHAs, and NGOs to help people cope with the effects of complex emergencies. Many military deployments will involve peace operations (peacemaking, peacekeeping, or peace enforcement) as well as support for civilian humanitarian assistance efforts in response to disasters. Although the roles of the humanitarian community and the military must remain distinct, as the number of complex emergencies increases, the necessity for effective collaboration between the two groups will expand.

U.S. Foreign Disaster Assistance Resources

Because the U.S. military is an instrument of U.S. foreign policy, military personnel often interact directly with other U.S. Government agencies in countries affected by a complex emergency. The Department of State, through the U.S. Embassy, and the U.S. Agency for International Development (USAID) are often in the forefront of humanitarian assistance activities in places where the U.S. military is also involved. For this reason, a more detailed discussion of USAID's emergency response capability is appropriate.

USAID was established in the Foreign Assistance Act of 1961, and as amended. In times of relative stability, USAID funds development projects in many countries throughout the world. These projects are generally implemented by international or national partner NGOs in many countries. When a complex emergency arises, and when directed to do

USAID funds development projects in many countries throughout the world. These projects are generally implemented by international or national partner NGOs in many countries. When a complex emergency arises, and when directed to do so, the USAID's Office of Foreign Disaster Assistance, which is part of the Bureau for Humanitarian Response, provides foreign disaster assistance and coordinates the U.S. Government's response.

so, the USAID's Office of Foreign Disaster Assistance (OFDA), which is part of the Bureau for Humanitarian Response, provides foreign disaster assistance and coordinates the U.S. Government's response. OFDA's mandate is "to save lives, alleviate suffering, and reduce the economic impact of disasters."[22]

OFDA works directly with the host nation government and in coordination with UN organizations, other IGOs, NGHAs, other donor governments, and NGOs. If the disaster warrants, OFDA deploys its own Disaster Assistance Response Team (DART) composed of disaster assistance specialists to assess the situation and recommend actions. These teams provide an operational presence capable of carrying out sustained response activities; develop and implement OFDA's field response strategy based on DART mission; coordinate the movement and consignment of U.S. Government assistance commodities; coordinate U.S. government assistance efforts with the affected country, other donor countries, assistance organizations, and when present, military organizations; fund assistance organizations (when delegated the funding authority); and monitor and evaluate U.S. Government-funded assistance authorities."[23]

Thus, NGOs working in a complex emergency might be funded wholly or in part by DART, with the accountability that accompanies financial support. Humanitarian organizations must weigh the effects of financial support from a government or other sources against their independence and impartiality. Some humanitarian organizations do not accept any government funding.

Providing Understanding

Many humanitarian organizations might be working on development projects in the host country when a complex emergency occurs. At that time, an umbrella organization, often an IGO such as OCHA or UNHCR, will assume a coordination role to facilitate the most effective use of NGO and donor resources.

Military civil affairs personnel will find the humanitarian community's lead agency an efficient point of contact with the humanitarian community. In some instances the humanitarian community will already have established its own coordination center in which the military can take part. In the case of Iraq, the designated POC is the Humanitarian Coordinator (HC) for Iraq, who is also the Designated Official (DO).

If the humanitarian community has not yet established a coordination center or if the military so chooses, the military can develop a civil-military operations center (CMOC); civilian-military information center (CIMIC), a NATO-term; humanitarian affairs coordination center (HACC); or humanitarian operations coordination center (HOCC). The title and sponsorship of the venue for civil-military coordination is unimportant, as long as such a venue exists.

Since many large international NGOs have a wide repertoire of competencies, military civil affairs personnel should inquire what programs each NGO conducts in a given area of the country. Because NGOs often compete with each other for scarce resources, coordination among NGOs might not appear optimal from a military point of view. NGOs are independent organizations and have their own agendas and constituencies. However, all recognize that collaboration is the best way to assist the people whom they serve. Effective communication and collaboration among civilian humanitarian organizations and between civilian and military organizations is essential. Humanitarian organizations' personnel and resources can be of immense help to the military by caring for civilian populations while the military works to restore a safe and secure environment. Neither civilian humanitarian organizations nor

Some HAO personnel, especially national personnel, will remain in the country or countries experiencing the complex emergency. As the security situation deteriorates, most expatriate HAO personnel leave, often going to neighboring countries to facilitate their timely return when it is safe. When assurance of security for personnel and supplies is given by the military, HAO personnel arrive to provide emergency humanitarian relief.

the military can function as effectively alone as they can in concert.

This interdependence is spelled out clearly by General (Retired) George A. Joulwan and Christopher C. Shoemaker, former director of Force Integration, Military Stabilization Program, in the Federation of Bosnia and Herzegovina: "Perhaps the overarching lesson to be gleaned from the first two years of conflict prevention operation in Bosnia and Herzegovina is that the military, no matter how effective and how efficient it might be, cannot by itself create the conditions for lasting peace. . . . The daunting challenges of building the kinds of institutions and processes that underlie the Dayton agreement, and, indeed, that are at the heart of conflict prevention are far beyond the abilities of any military. The military can bring about an absence of war; the military cannot bring about an enduring peace. The interaction between the military structure and the civilian structure thus becomes critical to the success of conflict prevention."[24]

Host nation, international, bilateral government, nongovernment civilian organizations and military forces are essential partners in restoring and maintaining peace following a complex emergency. Until these organizations can work together to facilitate civilians' ability to run their country in a peaceful and reasonably effective manner, the military must remain as peacekeepers or occupation forces. Effective civil-military interdependence is the military's ticket home from Bosnia, Kosova, Afghanistan, Iraq, and other complex emergencies yet to come. *MR*

The differentiation of civilian humanitarian and military roles during and after a complex emergency is essential for a number of reasons. The military is an instrument of its nation's foreign policy.… This is increasingly the case for the U.S. military. HAOs are not and must not be mistaken to be instruments of any nation's foreign policy. Their guiding principles are humanity, impartiality, and neutrality.

NOTES

1. Joint Publication (JP) 3-07.6, *Joint Tactics, Techniques, and Procedures for Foreign Humanitarian Assistance* (Washington, DC: Government Printing Office [GPO],15 August 2001), vii.
2. I use joint doctrine as the reference of choice throughout this paper since most operations involve joint participation of U.S. military forces as well as multinational coalition partners.
3. Dana Priest, *The Mission: Waging War and Keeping Peace with America's Military* (New York: W.W. Norton, 2003), 19.
4. *Joint Task Force (JTF) Commander's Handbook for Peace Operations* (Fort Monroe, VA: Joint Warfighting Center; 16 June 1997), 11-12.
5. "Guidelines on the Use of Military and Civilian Defence Assets to Support UN Humanitarian Activities in Complex Emergencies," *UN Relief Web*, on-line at <www.reliefweb.int/w/rwb.nsf/UNID/8A4E48712A846DEC1256CF 000394E45>, 20 March, 2003.
6. Andrew S. Natsios, *U.S. Foreign Policy and the Four Horsemen of the Apocalypse: Humanitarian Assistance in Complex Emergencies* (Westport, CT: Praeger, 1997), 7. Natsios is currently the Director of the U.S. Agency for International Development.
7. *The Sphere Project: Humanitarian Charter and Minimum Standards in Disaster Response* (Oxford, UK: Oxfam Publishing, 2000), 313.
8. PVO is a term used almost exclusively by U.S. entities. PVO is not used in JP 3-07.6.
9. Relief Web, *Guidelines,* 1.
10. JP 1-02, *Department of Defense Dictionary of Military and Associated Terms*, (Washington, DC: GPO, 23 March 1994).
11. Ibid.
12. Sphere Project, 313.
13. On-line at <www.care.org>.
14. On-line at <www.interaction.org>.
15. On-line at <www.icva.ch>.
16. Sphere Project.
17. Ibid., 34-317.
18. Relief Web, *Guidelines*, 6.
19. Ibid., 1.
20. Priest.
21. "General guidance for interaction between United Nations personnel and military actors in the context of the crisis in Iraq," *UN Relief Web,* on-line at <www.reliefweb.int/w/rwb.nsf/UNID/D1791CAE8850F70585256CF60070DBD0>, 21 March 2003.
22. U.S. Agency for International Development (USAID), Bureau for Humanitarian Response (BHR); Office of Foreign Disaster Assistance (OFDA), *Field Operations Guide for Disaster Assessment and Response* (Washington, DC: August 1998), xix. On-line at <www.info.usaid.gov/ofda>.
23. Ibid., xx
23. George A. Joulwan and Christopher C. Shoemaker, *Civilian-Military Cooperation in the Prevention of Deadly Conflict: Implementing Agreements in Bosnia and Beyond* (New York: Carnegie Commission on Preventing Deadly Conflict, December 1998), 36-37.

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Military Commissions, Past and Future

**Lieutenant Colonel Jody Prescott, U.S. Army,
and Major Joanne Eldridge, U.S. Army Reserve**

The detention of suspected terrorists has raised questions about how they will be held accountable for their alleged crimes. President George W. Bush authorized the use of military commissions to try non-U.S. citizens involved in terrorist activities. Lieutenant Colonel Jody Prescott and Major Joanne Eldridge examine the role of military commissions in the U.S. Army's history.

ON 17 JANUARY 1865, Confederate Army Captain Robert Kennedy was convicted by a military commission of spying and other violations of the law of war "in undertaking to carry on irregular and unlawful warfare."[1] Kennedy apparently intended to set New York City on fire and was seen in other parts of the state while in disguise. A military commission sentenced him to hang, and the reviewing authority confirmed the sentence.

Kennedy's case is not merely of historical interest because of the 11 September 2001 terrorist attacks on New York City; it is pertinent in light of President George W. Bush's Military Order of 13 November 2001, which authorizes the use of military commissions to try non-U.S. citizens involved in attacks for certain terrorist activities.[2] Significantly, U.S. Department of Defense (DOD) Military Commission Order (MCO) 1, which Secretary of Defense Donald Rumsfeld issued on 21 March 2002 to implement the Military Order, authorizes line officers to sit as members of military commissions or as members of review panels to review convictions of individuals tried by military commissions.[3]

What is a military commission, and when and why is it used rather than a court-martial? Generally, a military commission is a "court convened by military authority for the trial of persons not usually subject to military law but who are charged with violations of the laws of war, and in places subject to military government or martial law, for the trial of such persons when charged with violations of proclamations, ordinances, and domestic civil and criminal law of the territory concerned."[4]

Since the Mexican-American War, U.S. military and civilian commanders have faced circumstances requiring the administration of justice in cases for which courts-martial, authorized by statute or ordinary civilian courts, were inadequate or unavailable. Over time, the military commission evolved as a tool that commanders could use in such situations.

The case of Major John André, the British spy who conspired with Benedict Arnold during the Revolutionary War, is sometimes cited as an example of a military commission. However, the André case was actually held before a board of officers convened on 29 September 1780 by General George Washington to serve as a board of inquiry, which was not empowered to adjudge a conviction or to determine a sentence. After interrogating André, the board recommended to Washington that André "be considered as a spy from the enemy, and that agreeable to the law and usage of nations, he ought to suffer death."[5]

In 1776, the Continental Congress passed a law making espionage by non-U.S. citizens or nationals a capital offense triable by court-martial. Similarly, the 1776 Articles of War made giving assistance to the enemy and giving intelligence to the enemy capital offenses triable by court-martial. Interestingly, one of André's and Arnold's alleged accomplices, Joshua Hett Smith, was tried by court-martial and acquitted.[6] Washington, however, thought further inquiry into André's case was unnecessary and ordered André to be hanged.[7]

Under the provisions of the 1806 Articles of War, which retained court-martial jurisdiction over spies

and those who assisted or gave intelligence to the enemy, General Andrew Jackson court-martialed civilians accused of hostile acts. In March 1815, while New Orleans was still under martial law, Louis Louillier was tried by a general court-martial for a number of alleged offenses, including spying.[8] The court-martial found it only had jurisdiction over the spying offense, of which Louillier was acquitted.[9] In 1818, Jackson tried two British citizens by general courts-martial in Florida for espionage and for providing assistance to hostile Indians. Both were convicted and executed.[10]

The Mexican-American War to Reconstruction

The first documented use of a proceeding called a military commission by the U.S. Army occurred in Mexico in 1847. The U.S. Army occupied large expanses of Mexican territory that lacked the civilian judicial infrastructure to adjudicate cases not covered by the Articles of War.[11] That year, General Winfield Scott issued General Order (GO) 20, which allowed enumerated offenses committed by Mexicans and other civilians outside the jurisdiction of the 1806 Articles of War to be tried before military commissions. Military commissions were also given jurisdiction to try U.S. Army personnel for offenses not covered by the Articles of War. As many as 29 military commissions were held, some of which tried multiple defendants.[12]

Although sometimes cited as examples of military commissions, the trials of members of the Saint Patrick's Battalion, a unit of primarily ethnic Irish soldiers who fought for the Mexicans, were actually courts-martial for desertion from the U.S. Army.[13] Scott also ordered the creation of "councils of war," similar to military commissions, which tried violations of the law of war. Few cases were tried in this fashion, however, and such councils were not used again.[14]

The difficulties U.S. commanders faced in the Mexican-American War with regard to administering justice in the former Mexican areas for which they were responsible pale in comparison with the challenges confronting Union commanders during the Civil War. As the war progressed, the Union states were under limited martial law. Some Union states, like Kansas, were under greater degrees of martial law at various times. Stricter martial law often applied to border states like Kentucky and Missouri, where populations with Confederate sympathies provided support for Confederate irregulars. As the Union occupied ever more Confederate territory, Union commanders faced hostile populations in the area of operations, and strong, sometimes violent, antiwar sentiment in the rear.[16] From early in the Civil War, the military commission proved useful to

Union commanders. By war's end, thousands of cases had been tried.[17]

Although Union forces were used for various law-enforcement purposes during the war, the authority for use of military commissions was unclear. Statutory recognition of military commissions was sparse during the early part of the Civil War, and the commissions were not included in the Articles of War.[19] Union forces, under the command of Major General John Frémont, began using military commissions in Missouri as early as September 1861.[20] Frémont's successor, Major General Henry Halleck, had served as Secretary of State in the military government of California during the Mexican-American War, and he was familiar with the use of military commissions.[21] On 1 January 1862, Halleck issued a general order permitting and detailing the use of such commissions. Although military commissions were

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President Lincoln issued a proclamation authorizing the use of military commissions to try "rebels, insurgents, and all persons 'guilty of any disloyal practice affording aid and comfort to rebels.'" Lincoln suspended the writ of habeas corpus for individuals convicted and sentenced by courts-martial or military commissions. Congress modified Lincoln's proclamation [in 1863].

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not required to use the same procedures as courts-martial, the general order directed that military commissions be "ordered by the same authority, be constituted in a similar manner, and their proceedings be conducted according to the same general rules as courts-martial, in order to prevent abuses which might otherwise arise."[22]

Halleck's order tracks closely with Article 36 of the Uniform Code of Military Justice (UCMJ), which allows the President to prescribe regulations "which shall, so far as he considers practicable, apply the principles of law and the rules of evidence generally recognized in the trial of criminal cases in the United States district courts" to cases tried "in courts-martial, military commissions and other military tribunals, and procedures for courts of inquiry."[23] Other Union commanders followed Halleck's lead and issued their own general orders permitting the use of military commissions.[24]

In March and June 1862, after military commission convictions from Missouri were forwarded to the War Department for review, U.S. Army Judge Advocate Major John Lee, advised the Secretary of War that there was no legal basis for military commission trials of civilians within the United States.[25] Halleck assumed the post of general-in-

chief of the Army in July 1862, and when Congress created the new position of judge advocate general, Halleck did not recommend Lee for the position.[26] Instead, Colonel John [Joseph?] Holt was appointed judge advocate general. In September 1862, Holt

> *Military commissions were a prominent feature of the U.S. Army's administration of justice in the South during Reconstruction and were specifically authorized by Congress. . . . Although some civilians were still tried for offenses that had occurred during the Civil War, military commissions more often tried civilians for violations of civilian law in areas where civil courts were not functioning or were perceived by commanders as not administering justice impartially.*

advised the secretary of war that the use of military commissions was not only suited to the exigencies of the times, but that "long and uninterrupted usage made them part and parcel of military common law."[27]

On 24 September 1862, President Abraham Lincoln issued a proclamation authorizing the use of military commissions to try "rebels, insurgents, and all persons 'guilty of any disloyal practice affording aid and comfort to rebels.'"[28] Lincoln suspended the writ of habeas corpus for individuals convicted and sentenced by courts-martial or military commissions.[29] Congress modified Lincoln's proclamation with the Habeas Corpus Act of 1863. Persons imprisoned under the terms of the act were entitled to be discharged if a civilian grand jury did not indict them or if charges pending against them had not been presented to the grand jury. Military authorities were required to provide civilian courts with lists of such persons.[30]

In October 1864, Union military personnel arrested Lambdin Milligan in Indiana on charges that included conspiracy against the U.S. Government and disloyal practices. Milligan belonged to a group with strong Southern sympathies, and he agitated publicly against the war. A military commission in Indiana convicted and sentenced him to death. Meanwhile, the appropriate grand jury convened, deliberated, and adjourned without returning an indictment against Milligan. The U.S. Supreme Court eventually decided Milligan's appeal for a writ of habeas corpus in 1866. The Court concluded that it had jurisdiction to hear the case and that under the Habeas Corpus Act of 1863, Milligan should have been released. Further, the Court found that the military commission was without jurisdiction to try a civilian citizen of a loyal state (Indiana) when the ci-

vilian courts were still functioning, when the state had not been a theater of war, and when the state had never been under military dominion. The dissent in this 5-4 decision believed that conditions of military exigency did in fact exist in Indiana at the time Milligan was tried, but that the military commission was without jurisdiction because it had not been specifically authorized by Congress to try such cases.[31] After his release, Milligan brought a civil suit against the commander who ordered him arrested and the members of the military commission that had tried him. The jury found the military personnel liable for false imprisonment, but awarded Milligan only nominal damages.[32]

After the war, military commissions tried hundreds of cases in different areas of the country.[33] The two best known are the trials of the conspirators to assassinate Lincoln and the trial of Captain Henry Wirz, warden of the Andersonville, Georgia, prisoner of war camp.[34] The U.S. Supreme Court determined that a state of hostilities existed between the U.S. and Confederate states (except Texas) until the presidential proclamation of 2 April 1866 and between the United States and Texas until 20 August 1866.[35] The U.S. Supreme Court eventually upheld military commission convictions that occurred in these states during the respective time periods.[36] Before these decisions, however, at least two U.S. district courts in northern states found that military commission jurisdiction ceased when martial law ended in the respective southern states. Accordingly, these courts ordered the release of prisoners who had been tried and convicted after civil government had been reestablished.[37]

Military commissions were a prominent feature of the U.S. Army's administration of justice in the South during Reconstruction and were specifically authorized by Congress for use at this time.[38] Although some civilians were still tried for offenses that had occurred during the Civil War, military commissions more often tried civilians for violations of civilian law in areas where civil courts were not functioning or were perceived by commanders as not administering justice impartially. As during the Civil War, provost courts were used in various areas to adjudicate petty offenses. While the procedures of the military commissions had become fairly uniform by this time, the procedures before the provost courts often varied from command to command.[39] There were approximately 200 trials before military commissions, many of which involved multiple defendants.[40] For example, between March and September 1867, 216 individuals were tried before military commissions in North and South Carolina.[41] As the southern states gained readmission to the Union and representation in Congress, martial law was terminated within them, and all military com-

missions ceased to operate as of July 1870.[42]

The Indian wars to World War II

U.S. Army commanders occasionally used military commissions during conflicts with Native American tribes on the western frontier. In autumn 1862, a military commission in Minnesota tried 425 members of the Dakota tribe for offenses resulting from a bloody uprising that August.[43] Of that number, 321 were convicted. In taking action on the cases after his review, Lincoln eventually approved the death sentence in 38 of the 303 cases in which it had been adjudged.[44] In 1872, a military commission was used to try Modoc tribesmen for the murder of General Edward Canby and others.[45]

Military commissions were also employed during the 1898 Spanish-American War. Although military governments using the local court systems of Cuba and Puerto Rico were set up after the U.S. occupation of those islands, military commissions had jurisdiction to try cases until the peace treaty between Spain and the United States was ratified on 1 April 1899.[46] After the treaty became effective, the U.S. military government in Puerto Rico was replaced by a provisional government, which was itself replaced by a civilian government in 1900.[47] The situation in the Philippines might have been different, given the native insurgency, but the Philippines likewise had a civilian government by 1902.[48]

During the labor strife and civilian unrest in the United States in the early 1900s, some governors instituted martial laws, and several states used military commissions to try civilians charged with violations of martial law. In 1912 and 1913, state military commissions in West Virginia tried at least seven individuals for violations of martial law imposed by the state governor.[49] In Nebraska in 1922, several defendants were tried before a state military commission during a period of martial law. They were convicted and sentenced to prison terms. The U.S.

An officer from the 633d Medical Clearing Station pins 4-inch white aiming marks to the chests of German soldiers captured in U.S. uniforms and convicted of spying, Henri-Chapelle, Belgium, 23 December 1944.

Between October 1944 and May 1945, military commissions tried approximately 67 individuals, and at least 32 were executed. Among these were 18 German soldiers captured while wearing U.S. uniforms behind U.S. lines during the Battle of the Bulge. They were convicted of spying and executed. In the period between the end of the fighting in Europe and General Dwight D. Eisenhower's 25 August 1945 proclamation of a military government in Germany (with a system of military courts), military commissions continued to try individuals.

District Court for Nebraska, in denying the prisoners' applications for writs of habeas corpus, held that although the state courts had remained open during this time and the National Guard commander could have sent their cases to these courts, he was not required to do so. Accordingly, the court concluded that the sentences lawfully adjudged during the period of martial law remained valid even after martial law was lifted.[50] To the extent that these cases relied on the declaration of martial law as being determinative as to the propriety of holding military commissions, the U.S. Supreme Court has cast doubt as to whether these cases are still good law.[51]

World War II

The vast geographical scope of U.S. military operations during and after World War II presented commanders with numerous and complex challenges regarding the administration of justice. During the war, military commissions were used at home and abroad to try so-called "unlawful combatants." After the war, military commissions tried numerous Axis war criminals and, as the United States assumed the duties of an occupying power, exercised jurisdiction

over even ordinary cases involving local civilians. Significantly, World War II and the immediate postwar era were the last times U.S. Armed Forces conducted military commissions. Such commissions predate the UCMJ and the profound evolution of the present military justice system. Of note is that military commissions did not conduct the famous war crimes trials held after World War II. Instead, international military tribunals conducted the Nuremberg and Tokyo trials.[52]

In the *Quirin* case in 1942, the U.S. Supreme Court upheld the use of military commissions to try persons in the United States for offenses against the law of war and the Articles of War.[53] Quirin was one of eight men transported to the United States by German submarine in 1942. The men landed in New York and Florida wearing German military uniforms, which they buried, and carrying explosives. Their instructions from the German High Command were to destroy American war facilities and industries. The FBI captured all eight, and they were tried before a military commission appointed by President Franklin D. Roosevelt on 2 July 1942. During the proceedings, the defendants appealed to the U.S. Supreme Court, which found that the trial of the men (seven German citizens and one American) by military commission without a jury was legal. The decision was based on the men's status as unlawful combatants, saboteurs, who were not entitled to prisoner of war status.[54] Later in the war, on the basis of this decision, a federal appeals court found the military commission trial of a U.S. citizen in the employ of the Third Reich also to be proper. The citizen had been landed on the coast of Maine by a German submarine in 1944.[55]

Within hours of the attack on Pearl Harbor on 7 December 1941, the civilian territorial governor suspended the writ of habeas corpus and placed the territory under martial law.[56] The commander of the Military Department of Hawaii issued GO 4, which set up a judicial system composed of military commissions and provost courts to try cases. The civil courts reopened in January 1942 to conduct their normal business, but as agents of the military governor and under certain restrictions to their respective jurisdictions. For example, civil courts could not hear criminal cases or empanel grand or petit juries.[57]

In March 1943, by proclamation of the territorial governor, the civilian government resumed nearly all of its prewar functions. However, GO 2 allowed military commissions to retain jurisdiction over cases arising from a "violation by a civilian of the rules, regulations, proclamations, or orders of the military authorities, or of the laws of war."[58] Although the privilege of habeas corpus was restored in 1943, military rule in Hawaii continued for three more years.

The quality of the administration of justice under martial law was sharply criticized by U.S. Government investigations and reports. This was particularly true of the provost court system.[59] When convicted prisoners brought petitions for writs of habeas corpus before the U.S. Supreme Court, the prisoners were released immediately. The Supreme Court was unimpressed with the rationale for the use of the martial law court system rather than the civil courts, holding that civilians in Hawaii were entitled to the constitutional right to fair trial and that martial law was not intended to supersede civilian courts.[60]

Japanese war criminals, including commanders, soldiers, and military judicial officials, who had condemned Allied service members after unfair trials, were tried before Allied military courts in the China and Pacific Theaters. U.S. military commissions tried cases in occupied Japan and in liberated allied areas.[61]

Perhaps the best-known military commission trial in the Far East was that of General Tomoyuki Yamashita, former commander of Japanese forces in the Philippines. The commission was composed of five general officers and was convened by General Douglas MacArthur.[62] Yamashita was charged with unlawful disregard of and failure to discharge his duty as commander to control the members of his command from committing brutal atrocities in the Philippines against civilians and prisoners of war. His trial began on 29 October 1945 and concluded on 7 December 1945. The military commission found him guilty and sentenced him to death by hanging. Because his trial was held under U.S. auspices in the Philippines, a U.S. territory until 1946, Yamashita was able to appeal to the U.S. Supreme Court, arguing that the military commission lacked jurisdiction to try him. The Supreme Court disagreed, finding that the Articles of War granted jurisdiction to both general courts-martial and to military commissions and that the Geneva Conventions of 1929 did not require one form of trial over the other.[63] Yamashita's appeal was denied and he was hanged. International law now requires that prisoners of war receive the same kind of trial using the same rules by which service members of the detaining state are tried.[64]

In 1945, a German national named Eisentrager and 20 other Germans were convicted by a military commission in China on charges that they had provided intelligence information to the Japanese after the Third Reich surrendered. After the prisoners were repatriated to occupied Germany to serve their sentences, they petitioned for a writ of habeas corpus in U.S. District Court, alleging that their trial and imprisonment violated the U.S. Constitution and the Geneva Conventions relative to the treatment of prisoners of war. Their appeal eventually reached the U.S. Supreme Court. The Court held that enemy

prisoners of war, captured and tried outside the United States by military commissions for law of war offenses committed outside the United States and serving their sentences outside the United States, had no right to petition for a writ of habeas corpus in U.S. courts. The Court also rejected the petitioners' claims of procedural irregularities under the Geneva Conventions of 1929, concluding that the military commission that tried them had proper jurisdiction.[65]

The U.S. Army began using military commissions in the European Theater as early as October 1944. Army Group commanders "were authorized to appoint military commissions for the trial of persons not subject to the [Articles of War] who were charged with espionage or with violations of the law of war that threatened or impaired the security or effectiveness of U.S. forces."[66] Military commissions were required to have at least three officers, and defendants had the right to counsel. The commissions were not bound by the evidentiary rules for courts-martial or by the maximum punishments authorized under the Articles of War.[67]

Between October 1944 and May 1945, military commissions tried approximately 67 individuals, and at least 32 were executed.[68] Among these were 18 German soldiers captured while wearing U.S. uniforms behind U.S. lines during the Battle of the Bulge. They were convicted of spying and executed.[69]

In the period between the end of the fighting in Europe and General Dwight D. Eisenhower's 25 August 1945 proclamation of a military government in Germany (with a system of military courts), military commissions continued to try individuals. Even after the proclamation, trials by military commission continued for a short time.[70] The military government in occupied Germany gave way to a civilian occupation government in 1949, and the civilian occupation government ended (except for Berlin) in 1953.[71] In the Mediterranean Theater, as in the China Theater, certain U.S. allies allowed military commissions to try alleged Axis war criminals on their soil for a number of years after the fighting had stopped, even though by then these allies had reconstituted their judicial systems.[72]

Contemporary Litigation

The adjudication of cases dealing with the jurisdiction of a military commission actually began during the Civil War. As an alleged Lincoln Assassination conspirator, Dr. Samuel Mudd was tried in Washington, D.C., by a military commission. Mudd was a citizen of Maryland, a border state, and had not been in the military. At the time of his trial, the civil courts in Washington and Maryland were open.[73] Mudd was convicted and sentenced to a term of imprisonment. In 1866, after the *Milligan*

General Yamashita shortly after his 2 September 1945 surrender to U.S. forces in northern Luzon.

US Army

General Tomoyuki Yamashita was charged with unlawful disregard of and failure to discharge his duty as commander to control the members of his command from committing brutal atrocities in the Philippines against civilians and prisoners of war. . . . Because his trial was held under U.S. auspices in the Philippines, a U.S. territory until 1946, Yamashita was able to appeal to the U.S. Supreme Court, arguing that the military commission lacked jurisdiction to try him. The Supreme Court disagreed.

decision, Mudd petitioned for a writ of habeas corpus in U.S. District Court. Finding *Milligan* inapplicable, the court denied the petition. The court held that Lincoln was "assassinated not from private animosity nor any other reason than a desire to impair the effectiveness of military operations and enable the rebellion to establish itself into a government. It was not Mr. Lincoln that was assassinated, but the commander-in-chief of the Army for military reasons."[74] Mudd was subsequently pardoned for his humanitarian efforts in prison during a yellow fever epidemic.[75]

Seeking to clear his grandfather's name, Mudd's grandson brought suit against the U.S. Government in U.S. District Court. On 14 March 2001, the court found for the U.S. Government, first noting that the list of types of unlawful combatants set out in *Quirin* that could be tried before military commissions (saboteurs, secret messengers, spies, belligerents not in uniform) was not exhaustive. Further, the court

found that nationality and whether one was working under the direction of enemy forces was not to be determinative. Instead, the court found "[r]eading *Milligan* and *Quirin* together . . . , that if Dr. Samuel Mudd was charged with a law of war violation, it was permissible for him to be tried before a military commission even though he was a U.S. and Maryland citizen and the civilian courts were open at the time of his trial."[76] The court found that the charges did allege such a violation, and the commission therefore had jurisdiction. The government's decision to not disturb Mudd's trial verdict was therefore upheld.[77] On 8 November 2002, the U.S. Court of Appeals for the D.C. Circuit rejected the Mudd family's appeal, finding that Mudd, as a civilian, had no standing under the law which allows military members to seek expungement of military convictions.[78]

In a more recent case, a group calling itself the "Coalition of Clergy, Lawyers and Professors" brought suit in U.S. District Court seeking a writ of habeas corpus for detainees being held at Guantanamo Naval Air Station in Cuba. U.S. forces in Afghanistan had captured the detainees. On 21 February 2002, the court dismissed the petition, finding that the petitioners lacked legal standing, the court did not have jurisdiction to hear the petitioners' claims, and that no federal court would have jurisdiction over their claims. The court relied primarily on the holding of the U.S. Supreme Court in *Eisentrager*, noting that the petitioners had mistakenly characterized the naval base at Guantanamo Bay as part of the United States. The legal status of Guantanamo Bay is governed by a 1903 lease agreement between Cuba and the United States that gives the United States complete jurisdiction and control over the specified areas, but Cuba retains ultimate sovereignty over the leased lands and waters. Therefore, the court concluded that sovereignty over Guantanamo Bay remained with Cuba and not the United States.[79]

On 1 August 2002, a federal district court in Washington, D.C., rejected a lawsuit brought on behalf of Kuwaiti, British, and Australian detainees at Guantanamo. The detainees sought to compel the government to hold hearings on their cases or transfer them to the custody of their respective countries. The district court ruled that the detainees were outside the United States, and therefore without any constitutional rights of access to the U.S. judicial system.[80] The U.S. Court of Appeals for the District of Columbia affirmed the district court's decision on 11 March 2003.[81] Interestingly, on 8 November 2002, in a suit brought by the mother of a Guantanamo detainee, a British court held that keeping detainees in an area under "exclusive" U.S. control without recourse to a court to challenge their detention appeared to violate both British and international law.

The three-judge panel concluded, however, that it had no jurisdiction over the case.[82]

The Uniform Code of Military Justice

In 1950, the UCMJ replaced the old Articles of War and Articles for the Government of the Navy.[83] The UCMJ incorporated substantial reforms that gave those subject to the UCMJ greater rights and standardized the practice of courts-martial across the Armed Forces. In giving effect to the statutory provisions of the UCMJ, the preamble to the *Manual for Courts-Martial (MCM)* provides that the sources of military jurisdiction are the Constitution and international law, including the law of war.[84] Further, the preamble recognizes four means by which commanders apply military jurisdiction: courts-martial for trial of offenses against military law as well as general courts-martial for the trial of persons subject to trial by military tribunal under the laws of war; military commissions and provost courts for the trial of cases within those respective jurisdictions; courts of inquiry; and nonjudicial punishment.[85]

The UCMJ contains two articles (18 and 21) that specifically address the jurisdiction of military tribunals and commissions.[86] Article 18 provides that the jurisdiction of general courts-martial includes the authority to try persons for law of war violations by military tribunal and impose any punishment permitted by the law of war.[87] Article 21 provides that the provisions of the UCMJ "conferring jurisdiction do not deprive military commissions, provost courts, or other military tribunals of concurrent jurisdiction."[88] The UCMJ also contains three other references to the law of war: Article 104 (aiding the enemy), Article 106 (spies), and Article 106a (espionage). These provisions prohibit conduct by "any person," a broader definition than other code provisions, which prohibit conduct by "any person subject to the Code" and permit trials by general court-martial or military commission.[89]

With regard to the procedure to be used by military commissions, the MCM provides that "[s]ubject to any applicable rule of international law or to any regulations prescribed by the President or other competent authority, military commissions and provost courts shall be guided by the appropriate principles of law and rules of procedures and evidence prescribed for courts martial."[90] In his Military Order, Bush specifically found "that it is not practicable to apply in military commissions under this order the principles of law and the rules of evidence generally recognized in the trial of criminal cases in the [U.S.] district courts."[91]

In addition to extensive roles for judge advocates as presiding officers, prosecutors, and defense counsel, DOD MCO 1 provides the potential for significant roles for all military officers.[92] Each commis-

sion shall be composed of at least three but not more than seven members, as well as one or two alternate members, appointed by the secretary of defense or his designee (the appointing authority). Members and alternates will be commissioned officers from all the armed services, including Reserve officers on active duty, National Guard officers on active duty, and even retired officers recalled to active duty. Although DOD MCO 1 provides no rank or grade requirements, the appointing authority appoints members "determined to be competent to perform the duties involved."[93] The length of such appointment is not specified.

DOD MCO 1 provides detailed procedures applicable for each accused tried before a military commission. Each accused will be represented by a military defense counsel detailed to his case at no expense to him. The accused may request a particular military defense counsel (subject to reasonable availability) and may be represented by a civilian attorney at no expense to the United States (subject to certain requirements).[94] The accused may not discharge his military counsel.[95] Other rights may be summarized as follows:

 Right to a copy of the charges in a language the accused understands, as well as the substance of the charges, the proceedings, and documentary evidence.

 Presumption of innocence until proven guilty, and guilt must be proven beyond a reasonable doubt.

 Detailed defense counsel must be made available in advance of trial to prepare a defense.

 Access to evidence the prosecution intends to use as well as access to exculpatory evidence known to the prosecution.

 Right to remain silent at trial, with no adverse inference from the accused's decision not to testify; or to testify, subject to cross-examination.

 Witnesses and documents for the accused's defense, including investigative or other resources required for a full and fair trial.

 Right to present evidence at trial and cross-examine prosecution witnesses.

 Right to be present at proceedings, unless the accused engages in disruptive conduct, except for those portions closed to protect classified information and other national security interests.

 Access to sentencing evidence.

 Right to make a statement and submit evidence during sentencing proceedings.

 Trial open to the public unless closed by the presiding officer.

 Right not to be tried again by any commission on the same charge.[95]

The accused shall also have the right to submit a plea agreement to the appointing authority.[96] Unlike in a court-martial, however, the accused's pleading guilty before a military commission gets him precisely
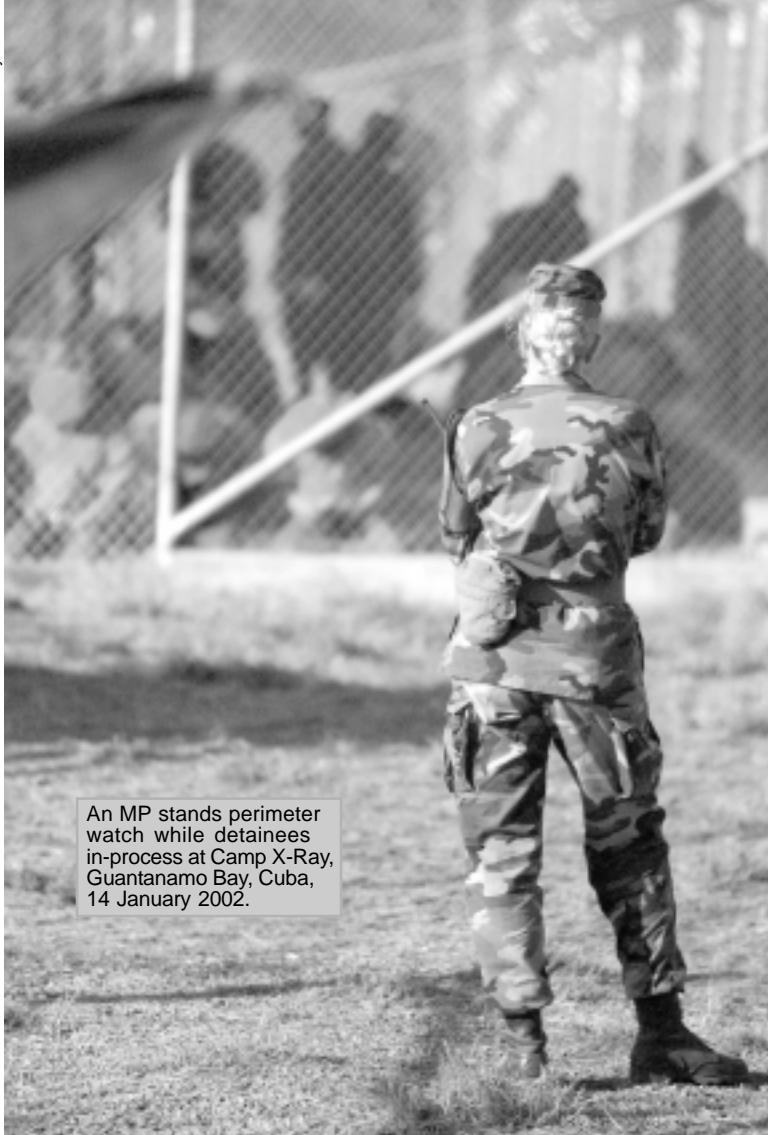
An MP stands perimeter watch while detainees in-process at Camp X-Ray, Guantanamo Bay, Cuba, 14 January 2002.

A federal district court in Washington, D.C., rejected a lawsuit brought on behalf of . . . detainees at Guantanamo. The detainees sought to compel the government to hold hearings on their cases or transfer them to the custody of their respective countries. The district court ruled that the detainees were outside the United States, and therefore without any constitutional rights of access to the U.S. judicial system.

that for which he bargained with the appointing authority rather than the lesser of either the sentence limitation in his pre-trial agreement or the sentence adjudged at court-martial.[97] The standard for admissibility of evidence is that evidence, which in the opinion of the presiding officer would have probative value to a reasonable person.[98]

Before voting for a finding of guilty, commission members must be convinced beyond a reasonable doubt that an accused is guilty of the offense based on the evidence admitted at trial. A finding of guilty requires a two-thirds majority of commission members. A sentence also requires a two-thirds majority

of members, except for a sentence of death, which must be unanimous. A sentence may include death; confinement for life or for a lesser period; payment of restitution or a fine; or such other lawful punishment as the commission deems appropriate. To adjudge a sentence of death, the commission must be composed of seven members.[99] Military officers have an important role to play in the post-trial phase of military commissions. The secretary of defense shall designate a review panel consisting of three military officers, which may include civilians commissioned in compliance with USC requirements.[100] The review panel must include at least one member who has experience as a judge. The panel is charged with reviewing the record of the commission proceedings and written submissions by the prosecution and defense. The panel must either forward the case to the secretary of defense with a recommended disposition or return the case to the appointing authority for additional proceedings where there has been a material error of law. The secretary of defense then reviews the case and forwards it to the president for review and final decision. The president can delegate the final decision to the secretary of defense if the president so desires.[101] The order sets forth no other avenues of judicial review or appellate relief, but this does not mean that the U.S. Supreme Court cannot review the case.[102]

Military commissions have been used extensively in the course of American history during periods of martial law, occupation, and war. Unfortunately, this flexibility and usefulness has led to some confusion as to the rules and procedures that should be applied at military commissions held under military order and their propriety under current domestic and international law. Some have criticized the use of military commissions as undermining the rule of law domestically and as not being viewed as credible by the international community.[103] Others criticize the use of a less stringent standard for the admissibility of evidence before the military commission as compared to ordinary U.S. criminal courts and the use of an appeal process that stays within the Department of Defense.[104] Significantly, many critics do not seem to distinguish clearly between the different kinds of military commissions and the various legal regimes that would apply to each respectively. A military commission sitting in the United States and trying U.S. citizens and residents under martial law, such as in *Milligan,* would be quite different from an occupation military commission, such as existed in post-war Germany or Japan. Both would be different from a law of war military commission sitting overseas and trying unlawful combatants, as in *Eisentrager.*

The president's authority to create a law of war military commission is clear under national and international law.[105] As specified in DOD MCO 1, the composition and procedures of the military commissions and review panels substantively comply with internationally accepted standards of due process.[106] Further, trials before military commissions may actually foster the rule of law and the administration of substantive justice. Military commissions will be allowed to consider probative evidence that ordinary U.S. criminal courts cannot, sensitive intelligence sources can be protected, and the issues of trial security are much less pronounced.[107]

On 28 February 2003, the Department of Defense General Counsel's Office released for public comment a draft of the Military Commission Instruction (Draft MCI) that set out the crimes and the elements of those crimes for which certain individuals could be tried before a military commission.[108] The crimes enumerated in the Draft MCI are "violations of the law of armed conflict or offenses that, consistent with that body of law, are triable by military commission."[109] The Draft MCI includes such crimes as the "Willful Killing of Protected Persons,"[110] "Employing Poison or Analogous Weapons,"[111] "Rape,"[112] and "Terrorism."[113] The Draft MCI does not include crimes against humanity or genocide as triable offenses and it does not specifically set out defenses to the enumerated offenses, but it does note that "[d]efenses potentially available to an accused under the law of armed conflict, such as self-defense, mistake of fact, and duress, may be applicable in certain trials by military commission."[114]

It is crucial that officers detailed to these bodies perform their judicial functions with the utmost care and understanding of their positions. These trials must satisfy domestic and international public opinion that justice be served. Further, these trials could constitute precedent for what the United States believes is the minimum due process required in trials of unlawful combatants for violations against the law of war and international law. Other nations or nonstate actors might then hold trials of captured U.S. soldiers or other U.S. Government employees using similar tribunals and procedures. ***MR***

NOTES

1. William Winthrop, *Military Law and Precedents,* 2d ed (Washington, DC: U.S. Government Printing Office [GPO], 1920), 767-70, 784; Ex parte *Quirin et al,* 317 U.S. 1, 31 (1942).
2. Military Order of 13 November 2001, "Detention, Treatment and Trial of Certain Non-Citizens in the War Against Terrorism," sec. 1(e), 66 F.R. 57833 (16 November 2001).
3. U.S. Department of Defense (DOD) Military Commission Order (MCO) 1, par. 4.A.(3) (21 March 2002).
4. Edward M. Byrne, *Military Law* (Annapolis, MD: Naval Institute Press, 1981), 752.
5. Winthrop, 518.
6. Ibid, 765; app. X, American Articles of War of 1776, 18 and 19, 967; Ibid., 102 note 21.
7. In a letter informing Major John André's commander of his decision to execute André, Washington noted that he could have summarily executed André rather than even convene a board of inquiry to look into his case (Robert Hatch, *Major John André: A Gallant in Spy's Clothing* [Boston: Houghton Mifflin Co., 1986], 262).
8. Winthrop, app. XII, American Articles of War of 1806, 56 and 57, 981; Ibid., 101, sec. 2, 985. Articles 104 (aiding the enemy), 106 (spies), and 106a (espionage) of the Uniform Code of Military Justice (UCMJ), enacted in 1950, track these early Articles of War provisions closely [10 USC, secs. 904, 906, 906a (2002); Winthrop, 822.
9. John Spencer Bassett, *The Life of Andrew Jackson* (New York: Macmillan, 1928), 226-27.
10. Robert V. Rimini, *Andrew Jackson and His Indian Wars* (New York: Viking, 2001),

154-56; Winthrop, 102, 832.

11. K. Jack Bauer, *The Mexican War* (New York: Macmillan, 1974), 253, 326-27.

12. Winthrop, 832, quoting General Order (GO) 20, 19 February 1847, Headquarters of the Army, Tampico; Ibid., 832 note 66; Bauer, 253, 326-27.

13. Robert P. Miller, *Shamrock and Sword: The Saint Patrick's Battalion in the U.S.-Mexican War* (Norman, OK: University of Oklahoma Press, 1989), 92-112.

14. Winthrop, 832-33.

15. Ibid., 829, 826, 824-27; Mark E. Neely, Jr., *The Fate of Liberty: Abraham Lincoln and Civil Liberties* (New York: Oxford University Press, 1991), 46-47, 168.

16. Neely, 65, 69, 174.

17. Winthrop, 834; Neely, 168.

18. Neely, 21, 30, 32-35.

19. "The President shall appoint a Judge Advocate General to whose office shall be returned, for revision, the records and proceedings of all courts-martial and military commissions" (Carol Chomsky, "The United States-Dakota War Trials: A Study in Military Injustice," 43 *Stanford Law Review* (1990): 66, quoting Act of 17 July 1862, chap. 36, sec. 5, 12 stat. 597, 598).

20. Neely, 41-42.

21. *The Army Lawyer: A History of the Judge Advocate General's Corps, 1775-1975* (Washington, DC: GPO, 1975), 46.

22. Chomsky, 56, note 269, quoting GO 1, Headquarters, Department of the Missouri, 1 January 1862.

23. 10 USC, sec. 936 (2002).

24. Winthrop, 833.

25. Chomsky, 66, notes 336-37, quoting two letters from Judge Advocate John F. Lee to Secretary of War E.M. Stanton.

26. *The Army Lawyer*, 47.

27. Chomsky, 66, note 338, quoting letter from Judge Advocate General John [Joseph?] Holt to Secretary of War Stanton.

28. Neely, quoting Lincoln's Proclamation of 24 September 1862, citation omitted. Apparently anticipating Lincoln's proclamation, Stanton issued an order on 8 August 1862 that such persons were liable to trial by military commission.

29. Winthrop, 829.

30. Ex parte *Milligan,* 71 US (4 Wall) 2, 107-08 (1866).

31. Ibid., 118-31, 141.

32. *Milligan v. Hovey,* 17 F. Cas. 380, 380-83 (D.C. Ind., 1871).

33. Neely, 176.

34. Winthrop, 839, note 5.

35. Carver's Cases, 16 Ct. Cl. 361, 383 (U.S. Ct. Cl., 1880), citation omitted.

36. *Carver v. U.S.,* 111 U.S. 609 (1884).

37. *U.S. v. Commandant of Fort Delaware,* 25 F. Cas. 590, 591 (D.C. Del., 1866); In re Egan, 8 F. Cas. 367, 368 (Cir. C. N. D. NY, 1866).

38. Winthrop, 848.

39. James E. Sefton, *The United States Army and Reconstruction* (Baton Rouge, LA: Louisiana State University Press, 1967), 30-32.

40. Winthrop, 853.

41. Sefton, 146.

42. Winthrop, 851.

43. *Medawakanton and Wahpakoota Bands of Sioux Indians v. U.S.,* 57 Ct. Cl. 357, 364 (U.S. Ct. Cl., 1922).

44. Chomsky, 33, 88.

45. Robert M. Utley, *Frontier Regulars: The United States Army and the Indian, 1866-1890* (Lincoln, NE: University of Nebraska Press, 1984), 206-07.

46. *Ochoa v. Hernandez y Morales,* 230 U.S. 139, 145-47 (1913); *Santiago v. Nogueras,* 214 U.S. 260, 263 (1909); ex parte *Ortiz,* 100 F. 955, 963 (D.C. Minn., 1900). The petitioner was tried for the murder of a U.S. soldier by a military commission two weeks before exchange of ratifications.

47. *Ochoa,* 230 U.S. at 147.

48. *Kepner v. U.S.,* 195 U.S. 100 (1904).

49. Ex parte *Jones,* 71 W.Va., 567 (Sup. Ct. Appeals, 1913); State ex rel. Mays, 71 W.Va. 519 (Sup. Ct. Appeals, 1912).

50. U.S. ex rel., *Seymour v. Fischer,* 280 F. 208, 209-12 (D.C. Neb., 1941).

51. *Duncan v. Kahanamoku,* 327 U.S. 304, 322, note 18 (1946).

52. *Flick v. Johnson,* 174 F.2d 983, 986 (D.C. Cir., 1949); Viscount Maughm, *U.N.O. and War Crimes* (London: John Murray, 1951), 87-101.

53. *Quirin,* 317 U.S. 1.

54. Ibid., 23-24, 42.

55. *Colepaugh v. Looney,* 235 F.2d 429 (10th Cir., 1956), citations omitted.

56. William H. Rehnquist, *All the Laws But One: Civil Liberties in Wartime* (New York: Knopf, 1998), 212.

57. Ex parte *Duncan,* 146 F.2d 576 (9th Cir., 1944), 579.

58. Ibid., 581-82.

59. Harry N. Scheiber and Jane L. Scheiber, "Bayonets in Paradise: A Half-Century Retrospect on Martial Law in Hawai'i, 1941-1946," 19 *Hawaii Law Review* (Fall 1997): 477, 509-18. Initially, the military commission that was set up to hear serious criminal offenses was composed of military and civilian members, but the civilians were eventually dropped.

60. *Duncan v. Kahanamoku,* 327 U.S. 304, 320-24 (1946).

61. Evan J. Wallach, "The Procedural and Evidentiary Rules of the Post-World War II War Crimes Trials: Did They Provide an Outline for International Legal Procedure?" 37 *Columbia Journal of Transnational Law* (1999): 851, 884 note 5; Matthew Lippman, "Prosecutions of Nazi War Criminals before Post-World War II Domestic Tribunals," 8 *Yearbook of International Law* (1999-2000): 14, 84, 85.

62. Colonel Frederick Bernays Wiener, "Comment: The Years of MacArthur, vol. III: MacArthur Unjustifiably Accused of Meting Out 'Victors' Justice' in War Crimes Cases," 113 *Military Law Review* (1986): 203, 204.

63. *Law Reports of Trials of War Criminals*, vol. IV, cas. 21 (London: H.M. Stationery Office, 1948), 1-78.

64. Geneva Convention Relative to the Treatment of Prisoners of War, arts. 82-88 (1949).

65. *Johnson v. Eisentrager,* 339 U.S. 763, 765-67, 777, 785, 789-90 (1950).

66. Colonel Ted B. Borek, "Legal Services During War," 120 *Military Law Review* 19 (Spring 1980): 29-30.

67. Ibid., 30.

68. Ibid., 31.

69. MAJ David A. Anderson, "Spying in Violation of Article 106, UCMJ: The Offense and the Constitutionality of its Mandatory Death Penalty," 127 *Military Law Review* (Winter 1990): 3.

70. *Trials of War Criminals,* vol. III (1948), Cas. 14, 56; Cas. 15, 60; Cas. 16, 62; vol. III, Cas. 17 and 18, 65.

71. *U.S. v. Tiede,* 86 F.R.D. 227, 228-38, U.S. Ct., Berlin, 1979. In 1952, U.S. occupation courts averaged 1,000 trials a month of German and U.S. defendants (*Madsen v. Kinsella,* 343 U.S. [1952], 341, 360 note 23).

72. *Trials of War Criminals,* vol. I, Cas. 2, 22 (1947); vol. XI, Cas. 63, 10 (1949).

73. *Mudd v. Caldera,* 134 F. Supp. 2d 138, 140-42 (D.C. D.C., 2001).

74. *Mudd v. Caldera,* 26 F. Supp. 2d 113, 117 (D.C. D.C., 1998).

75. Ibid., 117.

76. *Mudd,* 134 F. Supp. 2d at 146.

77. Ibid., 147.

78. Neil A. Lewis, "Suit to Clear Doctor Who Treated Booth is Dismissed," *New York Times,* 8 November 2002, 15.

79. *Coalition of Clergy et al. v. George Walker Bush et al.,* 189 F. Supp. 2d 1036, 1039, 1048-50 (C.D. Cal., 2002).

80. Neely Tucker, "Judge Denies Detainees in Cuba Access to U.S. Courts," *Washington Post,* 1 August 2002, A10.

81. Tucker, "Detainees Are Denied Access to U.S. Courts," *Washington Post,* 12 March 2003, A1 "Representatives for the detainees plan to appeal to the U.S. Supreme Court."

82. "Government doesn't care about Hicks: father," *The West Australian*, on-line at <www.thewest.com.au/20030312/news/latest/ tw-news-latest-home-sto91058.html>, 13 March 2003.

83. Enacted by Congress in 1950, the UCMJ is located at Title 10 USC, secs. 801-947 (2002).

84. Manual for Courts-Martial (MCM), 2002 ed., Part I, "Preamble."

85. Ibid.

86. The UCMJ contains several articles that address military commissions (10 USC, secs. 836, 837, 847, 848, 850 [2002]).

87. 10 USC, sec. 818 (2002).

88. Ibid., sec. 821 (2002).

89. Ibid., sec. 904, 906 (2002).

90. MCM, "Preamble," par. 2(b)(2), I-1. In his 1912 appearance before the House Committee on Military Affairs, the judge advocate general stated that it "is highly desirable that this important court should be continued to be governed, as heretofore, by the laws of war rather than statute" (*Trials of War Criminals,* vol. IV, 68 note 2, citation omitted).

91. Military Order, sec. 1(f).

92. The presiding officer is tasked with ensuring the proper conduct of the proceedings, ruling on questions of evidence, and sitting as a voting member of the military commission (DOD MCO 1, pars. 4.A(4), (5), and 6.F.

93. DOD MCO 1, par. 4.A.(2), (3).

94. Ibid., par. 4.C.(2), (3), (4).

95. Ibid., par. 5.

96. Ibid., par. 6.A.(4).

97. Rules for Courts-Martial 705(b)(2)(E) and 1107(d)(1), MCM, 2002 ed.

98. DOD MCO 1, par. 6.D.(1).

99. Ibid., par. 6.F; 6.G.

100. Ibid., par. 6.H.(4); 10, USC, sec. 603, 27.

101. Ibid., par. 6.H.(5), (6).

102. President Franklin D. Roosevelt's proclamation that convened the military commission that tried the German saboteurs in the *Quirin* case likewise denied defendants access to the courts, but the U.S. Supreme Court noted that it was still for a court to decide whether the proclamation were applicable to a particular case (*Quirin,* 317 U.S. at 23, 25).

103. Harold Hongju Koh, "The Case Against Military Commissions," *The American Journal of International Law* (April 2002): 338.

104. Sean D. Murphy, "U.S. Department of Defense Rules on Military Commissions," *The American Journal of International Law* (July 2002): 733-34.

105. Madsen, 343 U.S. at 348, 354; MG Michael J. Nardotti, Jr., "Military Commissions," *The Army Lawyer* (March 2002): 1, 4.

106. The International Convention on Civil and Political Rights, art. 14, sets out the minimum due process requirements for trials (G.A. Res. 2200A (XXI), U.N. GAOR, Supp. No. 21, 52, U.N. Doc. A/6316 (1966), 999 U.N.T.S. 171).

107. Ruth Wedgwood, "Al Qaeda, terrorism, and military commissions," *The American Journal of International Law* (April 2002): 331-32.

108. "DOD Releases Draft Military Commission Instruction," *DefenseLINK*, on-line at <www.defenselink.mil/news/Feb2003/b02282003_bt092-03.html>, 28 February 2003.

109. Draft MCI, par. 3.A, on-line at <www.defenselink.mil/news/Feb2003/d20030228dmci.pdf.>

110. Draft MCI, par. 6.A.1.

111. Draft MCI, par. 6.A.8.

112. Draft MCI, par. 6.A.16.

113. Draft MCI, par. 6.A.18.

114. Draft MCI, par. 4.B. "With respect to the defense of lack of mental responsibility, the accused has the burden of proving by clear and convincing evidence, that, as a result of a severe mental disease or defect, the accused was unable to appreciate the nature and quality of the wrongfulness of the accused's acts."

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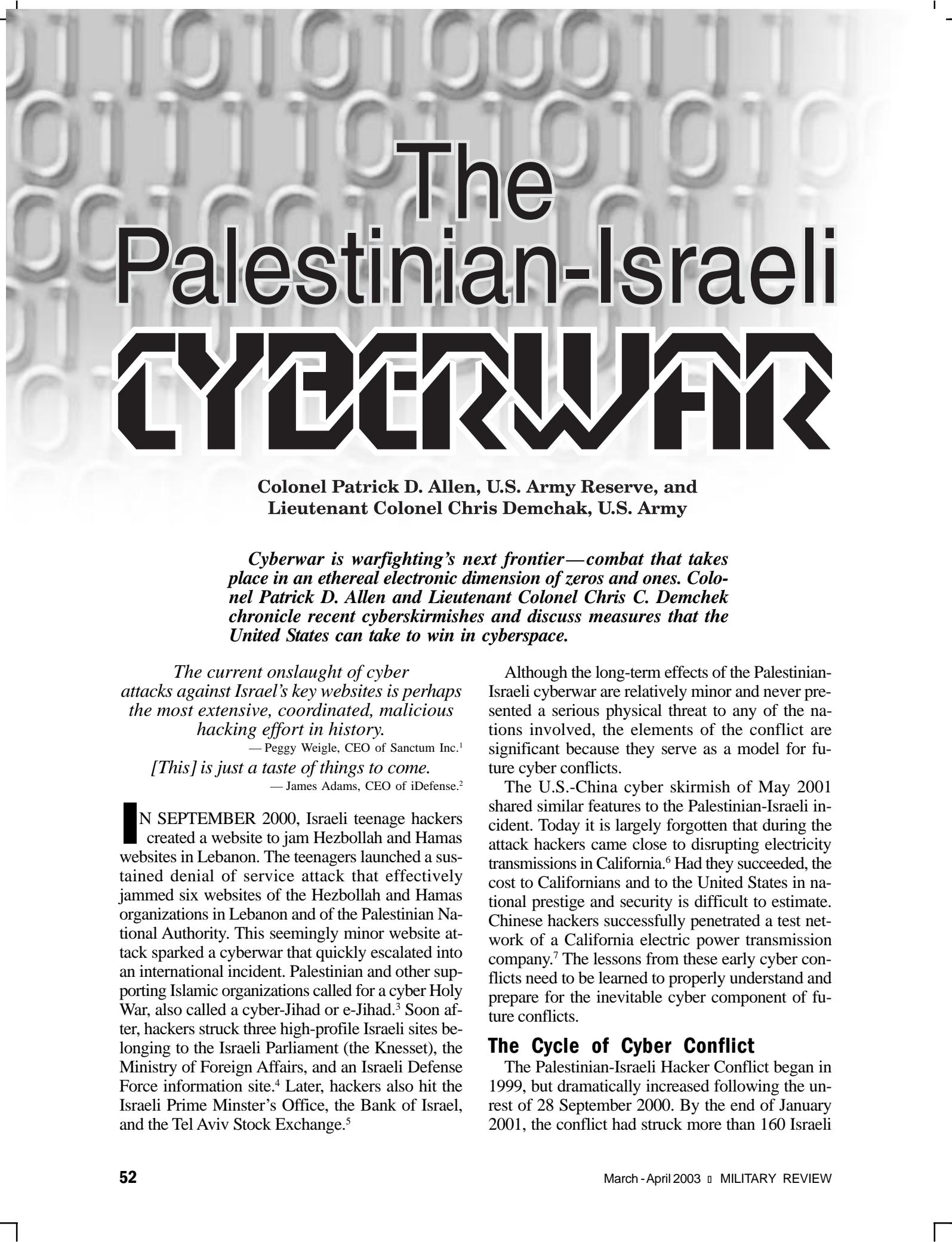
The Palestinian-Israeli CYBERWAR

Colonel Patrick D. Allen, U.S. Army Reserve, and
Lieutenant Colonel Chris Demchak, U.S. Army

Cyberwar is warfighting's next frontier—combat that takes place in an ethereal electronic dimension of zeros and ones. Colonel Patrick D. Allen and Lieutenant Colonel Chris C. Demchek chronicle recent cyberskirmishes and discuss measures that the United States can take to win in cyberspace.

The current onslaught of cyber attacks against Israel's key websites is perhaps the most extensive, coordinated, malicious hacking effort in history.
— Peggy Weigle, CEO of Sanctum Inc.[1]

[This] is just a taste of things to come.
— James Adams, CEO of iDefense.[2]

IN SEPTEMBER 2000, Israeli teenage hackers created a website to jam Hezbollah and Hamas websites in Lebanon. The teenagers launched a sustained denial of service attack that effectively jammed six websites of the Hezbollah and Hamas organizations in Lebanon and of the Palestinian National Authority. This seemingly minor website attack sparked a cyberwar that quickly escalated into an international incident. Palestinian and other supporting Islamic organizations called for a cyber Holy War, also called a cyber-Jihad or e-Jihad.[3] Soon after, hackers struck three high-profile Israeli sites belonging to the Israeli Parliament (the Knesset), the Ministry of Foreign Affairs, and an Israeli Defense Force information site.[4] Later, hackers also hit the Israeli Prime Minster's Office, the Bank of Israel, and the Tel Aviv Stock Exchange.[5]

Although the long-term effects of the Palestinian-Israeli cyberwar are relatively minor and never presented a serious physical threat to any of the nations involved, the elements of the conflict are significant because they serve as a model for future cyber conflicts.

The U.S.-China cyber skirmish of May 2001 shared similar features to the Palestinian-Israeli incident. Today it is largely forgotten that during the attack hackers came close to disrupting electricity transmissions in California.[6] Had they succeeded, the cost to Californians and to the United States in national prestige and security is difficult to estimate. Chinese hackers successfully penetrated a test network of a California electric power transmission company.[7] The lessons from these early cyber conflicts need to be learned to properly understand and prepare for the inevitable cyber component of future conflicts.

The Cycle of Cyber Conflict

The Palestinian-Israeli Hacker Conflict began in 1999, but dramatically increased following the unrest of 28 September 2000. By the end of January 2001, the conflict had struck more than 160 Israeli

and 35 Palestinian sites, including at least one U.S. site. From July 1999 to mid-April 2002, 548 Israeli domain (.il) websites were defaced out of 1,295 defacements in the Middle East, and additional sites were subjected to severe denial of service attacks.[8]

The two main types of attacks were website defacement and distributed denial of service (DDoS). Website defacements tend to focus on high-profile political sites, such as government websites. In some cases, commercial transactions were curtailed for days because of repeated website defacements.[9] Broadcast servers that hackers used to launch attacks from one side were frequently used by the opposing side to launch a similar type of attack.[10] Code used to attack sites on one side was rewritten by the opposing side, which then launched a counterattack.[11] The DDoS attacks shut down opposing sites for days and added to the strain on the Internet infrastructure in the region.[12]

Attacks were also made against companies providing telecommunications infrastructure such as AT&T, which was reportedly hired to help increase the bandwidth of targeted Israeli sites.[13] One pro-Palestinian hacker by the name of Dodi defaced an Internet service provider (ISP) for Israeli senior citizens and left a message claiming that he could shut down the Israeli ISP NetVision, which hosts almost 70 percent of all the country's Internet traffic.[14]

On about 8 November 2001, Unity, a Muslim extremist group with ties to Hezbollah, announced that it had begun phase three of a four-phase strategy. Phase one focused on crashing official Israeli government sites. Phase two included attacks on the Bank of Israel and the Tel Aviv Stock Exchange. Phase

*O*ne pro-Palestinian hacker by the name of Dodi defaced an Internet service provider (ISP) for Israeli senior citizens and left a message claiming that he could shut down the Israeli ISP NetVision, which hosts almost 70 percent of all the country's Internet traffic. . . . The Israeli Internet Underground (IIU), a group of hackers who banded together to help increase the security of Israeli websites, claims there is already evidence of phase-four attacks. This includes the destruction of business sites with e-commerce capabilities, which the IIU believes caused an 8 percent dip in the Israeli Stock Exchange.

three included targets such as the Israeli ISP infrastructure and the site for Lucent and Golden Lines, an Israeli telecommunications provider. Unity stated that it would hold off on the fourth and final phase, namely the destruction of Israeli e-commerce sites, threatening millions of dollars of losses in transactions.[15]

The Israeli Internet Underground (IIU), a group of hackers who banded together to help increase the security of Israeli websites, claims there is already evidence of phase-four attacks. This includes the destruction of business sites with e-commerce capabilities, which the IIU believes caused an 8 percent dip in the Israeli Stock Exchange.[16]

Although sporadic hacking has occurred between U.S. and Chinese hackers over the last few years, the collision of the U.S. EP-3 reconnaissance aircraft with a Chinese F-8 interceptor sparked the main conflict. Chinese hackers increased their activity against the United States and attempted to organize a major hacking effort during the first week in May 2001.[17]

Similar to the Palestinians, the Chinese created a website from which volunteer hackers could obtain the tools and techniques necessary to launch the "USA Kill" program.[18] The U.S. National Infrastructure Protection Center (NIPC) announced a warning on 26 April 2001 to all U.S. government and commercial websites.[19] Meanwhile, U.S. hackers, incensed by the prolonged holding of the EP-3 crew in China, began organizing the "China Killer" program.[20] By the time Chinese hackers declared a truce, they claimed to have defaced or denied service to more than 1000 U.S. websites. Pro-U.S. hackers apparently caused a similar amount of damage to Chinese websites.

Four Phases of Future Cyber Conflicts

Cyber conflicts will—

☐ Involve an initial period of surprise, followed by a much longer period of adaptation and recovery.

☐ Escalate rapidly and broaden as attackers seek vulnerable targets.

☐ Develop rapidly into international conflict as volunteer hackers align themselves with, or against, the various factions.

☐ Increase the pace of cyber arms development and proliferation.

Based on observations of the conflicts between Palestine and Israel and China and the United States, we believe future cyber conflicts will occur in four phases.

*J*erusalembooks.com, Israel's largest on-line book provider, was shut down for days because of a web-defacement attack. The firm faced days of lost sales and the risk of a prolonged lack of consumer confidence in the security of on-line transactions. In a similar manner, the Israeli Land Administration Office's website was shut down for months.

Phase I: Surprise and adaptation. The Palestinian-Israeli cyberwar is an excellent example of how a nation can be surprised by a cyber attack. The Israeli teenage hackers initially surprised pro-Palestinian websites with their DDoS attacks. When the Palestinians declared a cyber-jihad against Israel, the pro-Palestinian hackers achieved an equal level of surprise against the targeted Israeli websites. The Israelis were surprised that their own citizens had initiated the cyber conflict. They also were surprised by the magnitude of the pro-Palestinian response and by the vulnerability of their government and civilian sites. After the initial shock, each side went through a period of repairing system damage and improving defenses against future attacks.

The initial effects of the conflict are worth considering. Jerusalembooks.com, Israel's largest on-line book provider, was shut down for days because of a web-defacement attack. The firm faced days of lost sales and the risk of a prolonged lack of consumer confidence in the security of on-line transactions.[21] In a similar manner, the Israeli Land Administration Office's website was shut down for months.[22] For Israel as a whole, such shutdowns created a lack of confidence. In addition, the large

number of DDoS attacks (more than 115 in the region between 6 October and 2 December 2000) strained the Middle East's already sparse Internet infrastructure.[23]

The ultimate cost of cyber attack is generally greater to commercial targets than it is to government sites. As stated by Lawrence Gershwin, the CIA's top technology adviser, in congressional testimony, "Our 'wired' society puts all of us—U.S. business, in particular, because they must maintain an open exchange with customers—at higher risk from enemies."[24]

When a government site goes down or is defaced, the nation might lose some face. But when a company's website is shut down, it loses revenue. Matt Krantz and Edward Iwata in a *USA Today* article stated, "Some businesses lose $10,000 to several million dollars a minute when networks go down. . . . They lose, on an average, $100,000 an hour in lost productivity."[25] Reality Research estimated that businesses worldwide stood to lose more than $1.5 trillion last year as a result of cyber assaults.[26]

Even though commercial sites have a vested interest in defending against cyber attack, the drive for cost effectiveness leads most companies to ignore their website's vulnerabilities until they are hacked.[27] Therefore, there is a need to create major incentives for businesses to be secure in cyberspace, and there should be penalties for not being secure by a specific date.

Phase 2: Rapid horizontal escalation. The Palestinian-Israeli cyber conflict broadened quickly. Four weeks into the conflict, pro-Palestinian hackers struck a U.S. website. Three weeks later, Israeli hackers struck websites in Iran and Lebanon.[28] Since Israel had more websites from which to launch a counter cyber attack than did the Palestinians, the Israeli hackers began seeking vulnerable

sites outside the Palestinian National Authority and Lebanon. For example, an Israeli hacker group calling itself "the Mossad" defaced the Iranian president's website, claiming Iran was a supporter of Lebanon-based terrorist organizations.

Cyber warfare escalates horizontally and more rapidly than in standard warfare for three reasons. First, the main criteria for civilian hacker attacks appear to be vulnerability as opposed to criticality. The search for vulnerable targets expands until one is found. If government and commercial sites in the target nation are not sufficiently vulnerable, then target sites in other nations friendly to the target nation will be struck. Conversely, professional hackers in the employ of a specific nation are likely to escalate only as necessary to obtain the desired effect on the target nation.

The more bipolar a conflict, such as the Arab-Israeli conflict, the greater the chance that it will attract volunteers to one side or the other. Each side perceives the other as having permanent allies that will always back their enemies. Therefore, the United States was declared a target with Israel shortly after the Palestinian-Israeli cyber conflict began. . . . The degree of international participation observed in cyber conflicts has striking parallels to the volunteerism seen during the Spanish Civil War, a precursor to World War II.

Second, international hacker groups view the situation as one in which they can wield power without fear of retaliation. Many hackers want to show they support a cause. Since the Web includes built-in public dissemination methods, hacking into any target on the Web tends to gain some notoriety.

Third, cyber conflicts so far have been polarized, or bipolar. The more bipolar a conflict, such as the Arab-Israeli conflict, the greater the chance that it will attract volunteers to one side or the other. Each side perceives the other as having permanent allies that will always back their enemies. Therefore, the United States was declared a target with Israel shortly after the Palestinian-Israeli cyber conflict began.[29]

Traditionally, allies of a warring nation were relatively safe from military attack unless they were brought directly into the fighting. The cost of bringing a neutral nation into the fighting usually incurred

at least some penalty on the nation choosing to escalate. In cyberspace, however, the cost of escalation is small for a nation, and almost nonexistent for an individual hacker. Therefore, rapid horizontal escalation will likely occur in future cyber conflicts.

Phase 3: Rapid non-state internationalization. Cyber conflict tends to attract two types. The first type includes groups of talented hackers who are frequently involved in international cyber incidents. The second consists of amateur hackers attracted through patriotic or ideological fervor. The Palestinian-Israeli cyber conflict attracted hackers from Israel, Palestine, Lebanon, Germany, Saudi Arabia, Pakistan, Brazil, and the United States. Most of the attacks against Israel were launched from outside Israel or the Palestinian National Authority.[30] Of note is that one or more Brazilian hacker groups attacked both sides in the Palestinian-Israeli conflict, apparently trying to show up each side's participants. The U.S.-China cyber skirmish attracted pro-U.S. hackers from the United States, Saudi Arabia, Pakistan, India, Brazil, Argentina, and Malaysia. Pro-Chinese hackers were attracted from China, Japan, Indonesia, and Korea. Note that the alignments of the hackers did not necessarily match the desires of the nation, except in those nations where the government tightly controls the Internet.

The degree of international participation observed in cyber conflicts has striking parallels to the volunteerism seen during the Spanish Civil War, a precursor to World War II. This conflict between fascists on one side and communists and democrats on the other drew large numbers of foreign volunteers to both sides. In both the Spanish Civil War and the Palestinian-Israeli cyber conflict, ideology,

not profit, motivated volunteers. Mercenary hackers exist, but they were not reported as being active in either the Palestinian-Israeli or the U.S.-China cyber conflicts.

Most hackers involved in either the Palestinian-Israel or U.S.-China cyber conflicts were veterans of previous international cyberwars. The Pakistani hackers, for example, were also involved in defacing Indian websites, and Brazilian hackers were involved in defacing U.S. sites.[31] "Hactivism" is tempting when hackers have the power to participate on the international scene.[32]

One hacker, or a small group of hackers, can do a lot of damage in short order. During the U.S.-China cyber conflict, a hacker group named "PoizonB0x" successfully hacked more than 400 Chinese (*.cn) websites.[33] One report estimated there were only 30 core hackers in the Palestinian-Israeli conflict who provided the tools, while the volunteer script kiddies provided the "brute force" checks, scanning potential target sites for vulnerabilities.[34] The brute force search of 209-series IP addresses allowed Chinese hackers to discover the presence of an unsecured electric power transmission test network in California.[35]

Even if the initial cyber strike of a future conflict is a well-coordinated military action, volunteers from many nations will likely be involved in copycat attacks, complicating real-war combat operations. This threat alone has numerous implications for national sovereignty and international law.

Phase 4: Global Learning and Increased Cyber Arms Development and Proliferation. Hacking tools used and improved in the Palestinian-Israeli cyberwar soon appeared in other international and domestic hacks. During the Palestinian-Israeli cyberwar, Israeli hackers developed a new type of DDoS attack tool. Teenage hackers in the United States acquired this attack tool from Israeli hackers and planned a worldwide attack on the Internet to take place on New Year's Day 2001. Had the FBI not been alerted to the plot, the attack might have succeeded in seriously disrupting the Internet on New Year's Day.[36]

During the U.S.-China cyber skirmish, the Carko DDoS attack was launched.[37] Not only did a Carko DDoS agent attempt to crash the target system, it used a buffer overflow attack to enter a new root password, or it installed a back door in the target system while the target system was recovering from the attack. This meant systems that were brought down by Carko attacks needed to be checked for software that would allow later penetrations.

Although DDoS attacks were known and used before this conflict, the ability for one person with limited bandwidth to undertake a large-scale DDoS attack is a fairly recent development. This type of DDoS attack can use a 56-kilobyte modem and an asymmetric digital subscriber line (ADSL) to begin an attack, which is then magnified 10,000 times by net service broadcasters to generate attacks of the magnitude of two thirds of a T1 line. "With tools like these, a 56-kilobyte modem can become a powerful weapon and your bandwidth is irrelevant," notes Ben Venzke, of iDefense.[38] A few coordinated laptop attacks through modems, therefore, can generate a combined attack equal to several T1 lines or even a T3 line. Such an attack can swamp most systems.

In addition to DDoS attacks launched through broadcast sites, there is also a technique whereby hackers place software on other Internet servers and later trigger it at a particular time. These infected servers are called zombies in that they mindlessly participate in DDoS attacks. The FBI discovered that 560 servers at 220 Internet sites had been infected for use in a single widespread DDoS attack.[39]

Overall, the rate of cyber arms development tends to increase during cyber conflicts, just as weaponry

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develops faster during war. What is more challenging, however, is that the rate of proliferation of cyber arms is much faster than the proliferation of traditional arms.

Policy Implications

Based on these events, there are four national and international policy needs:

1. To decide who will provide security on the Web.

2. To provide legal responses to rapid horizontal escalation.

3. To enforce legal responsibility for hacker citizens responsible for international incidents.

4. To halt proliferation of cyber arms.

Who will provide security on the Web. The main policy question associated with the cost of doing business on the Web is, "Who is responsible for securing the Web?" Is it the large ISP? Corporations? The government? Or will the Internet remain a free-fire zone?[40]

During the U.S.-China cyber skirmish, the Carko DDoS attack was launched. Not only did a Carko DDoS agent attempt to crash the target system, it used a buffer overflow attack to enter a new root password, or it installed a back door in the target system while the target system was recovering from the attack. This meant systems that were brought down by Carko attacks needed to be checked for software that would allow later penetrations.

Some nations have chosen to assign Web security to the government, especially in nations where the Internet is considered a threat to the government's absolute control, such as in China. Most European nations are passing laws that place the government as the central guarantor of Web security. As economies and communications rely more on the Internet, nations will make choices that place them somewhere along the spectrum of security versus privacy. In most cases, laws will ensure the security of the Web at the cost of personal privacy.[41] The United States will need to decide where on this spectrum it will operate and what level of cyber security it will need to provide to support secure transactions and a measure of privacy.

Legal response to rapid horizontal escalation. The higher a cyber conflict's visibility, the more it will attract international hackers, and the sooner hackers will seek out vulnerable sites. What are the legal options of a nation attacked in a conflict in

which it is not involved? For a legal response, the identity of the perpetrator must be established. However, cyber attacks are not launched frequently by a nation, but by private citizens. It is difficult to justify a retaliation bombardment against hackers who violate their own nation's neutrality or allegiance with an attacked country. Hacking is an asymmetric threat from non-state actors that makes justified retaliation difficult.

Little can be done in cyberspace to admitted hackers because they do not present a ready target. Individual hackers or hacker groups do not tend to own infrastructure that can be targeted, even in cyberspace. When such infrastructure exists, getting legal access to it is difficult because of national sovereignty. For example, when the United States performed a sting operation against two Russian hackers, issues of due process arose because of the FBI's long-distance electronic search of the hacker's computers in Russia.[42] Any response must consider the possible collateral damage potentially caused by such retaliation. Since hackers tend to route their attacks through many third-party servers, any cyber retaliation must consider the fact that the counterattack might fall on the servers of innocent bystanders.

Overall, nations need to define their legal authority to exercise sovereignty, prosecute, and impose penalties on hackers convicted of cyber attacks. International agreements not to harbor hijackers contributed to a significant decrease in such events. Similar international agreements regarding cyberspace crime could help reduce the sanctuaries available to hackers.

Legal responsibility. Every nation must face the fact that its citizen hackers can cause international incidents not in its best interest. Israel was dragged into a cyber conflict by its own teenage hackers, not as a government decision. Israel was not prepared

to wage a cyberwar and was more vulnerable than its opposition.

Cyber violations of online externally connected networks lie in a gray area of international and domestic security laws. To locate and prosecute hackers, nations must rely on the authorities and laws of the hacker's host nation. Israel estimated that damage caused by the globally distributed "Love" virus, including the disruption of national cellular phone companies, reached $12 million. However, Israel could not file criminal charges against the hacker because his home country (the Philippines) did not make virus writing a criminal offence until after the event.[43]

Criminal punishment is particularly difficult when the hackers operate from a blatantly hostile nation. However, nations have certain rights under an internationally recognized protective principle if offending nations are not helpful. There is international case law, albeit limited, that might support state action in response to cyber attacks. Under this principle, when a person from country A harms country B, and country A does not prevent that person from continuing to do harm, then country B has the right to take action against country A.[44] Although this principle has not yet been applied in cyberwar cases, the legal precedence exists.

If a nation intends to treat hackers as criminals and terrorists, then its policy will be designed to squash all hacker activities, however mild. Such a policy is sure to alienate its hacker citizens. Judging from their proposed cyber laws, most European nations appear to be heading in this direction.[45]

The United State is less likely to crack down severely on domestic hackers. Such a crackdown would not only be unnecessary, but counterproductive. An option more likely to succeed is to provide incentives for white-hat hackers. These hackers

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have an interest in helping others and do no damage. White-hat hackers could be encouraged to locate vulnerabilities and help system administrators apply the necessary patches. Government or private security agents could verify that the patch is correct and does not include a back door. White-hat hackers could be publicly rewarded and brought in as independent evaluators of other white-hat solutions. White-hat hackers should be rewarded and their work confirmed, but they should not necessarily be controlled or officially employed by the government. The image of independence, as well as doing good, has great appeal among white-hat hackers.

Conversely, black-hat hackers need to be identified and prosecuted. The legal system needs to develop the full range of formal sanctions against hacking, cracking, and carding that vary according to the socially unacceptable effects of these activities. At present, federal and state agencies in the United States are woefully unqualified to handle the degree and volume of hacks.[46] A major difficulty is that the government has difficulty attracting and retaining skilled computer specialists because of the poor salary it offers.[47]

One approach might be to use white-hats to hunt down black hats in cyberspace. Elite military forces dedicated to averting, diverting, derailing, tracking, and punishing major hacks against U.S. and global interests might keep order on the Web and keep cyber conflicts from escalating.[48]

International Response

Every cyber skirmish sparks the development of new cyber arms, which are then rapidly disseminated to professional and amateur hackers around the globe. Proliferation has significant implications for

monitoring hacking tools used in conflicts and in new Web technologies in general. In addition to monitoring the capabilities of these new tools, nations need to monitor the chats of amateur hackers who cannot resist trying out the power of the new toy. (Hackers sponsored by a nation will not use the new weapon unless it is part of an overall plan, so that the surprise element is not wasted.) Therefore, each nation needs to develop countermeasures to help preclude the use of the new cyber weapon or to mitigate its effects. Scanning servers for zombie software that allows DDoS attacks to be launched needs to be performed regularly to minimize the magnitude of future attacks. By keeping abreast of new hacking tools and methods, a nation can be better prepared to preclude or mitigate their effects.

In any modern conflict, cyberspace can be an additional avenue of attack. Because the United States is the largest player in the international political environment, it has become a lightning rod for hacking and terrorist attacks, regardless of whether the nation was involved in the initial conflict. Until 11 September 2001, the United States was fairly complacent about its enemies overseas. However, the distance between the United States and its enemies is dramatically reduced. The lessons from early cyber conflicts need to be learned now to properly prepare for future conflicts. **MR**

## NOTES

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Officership
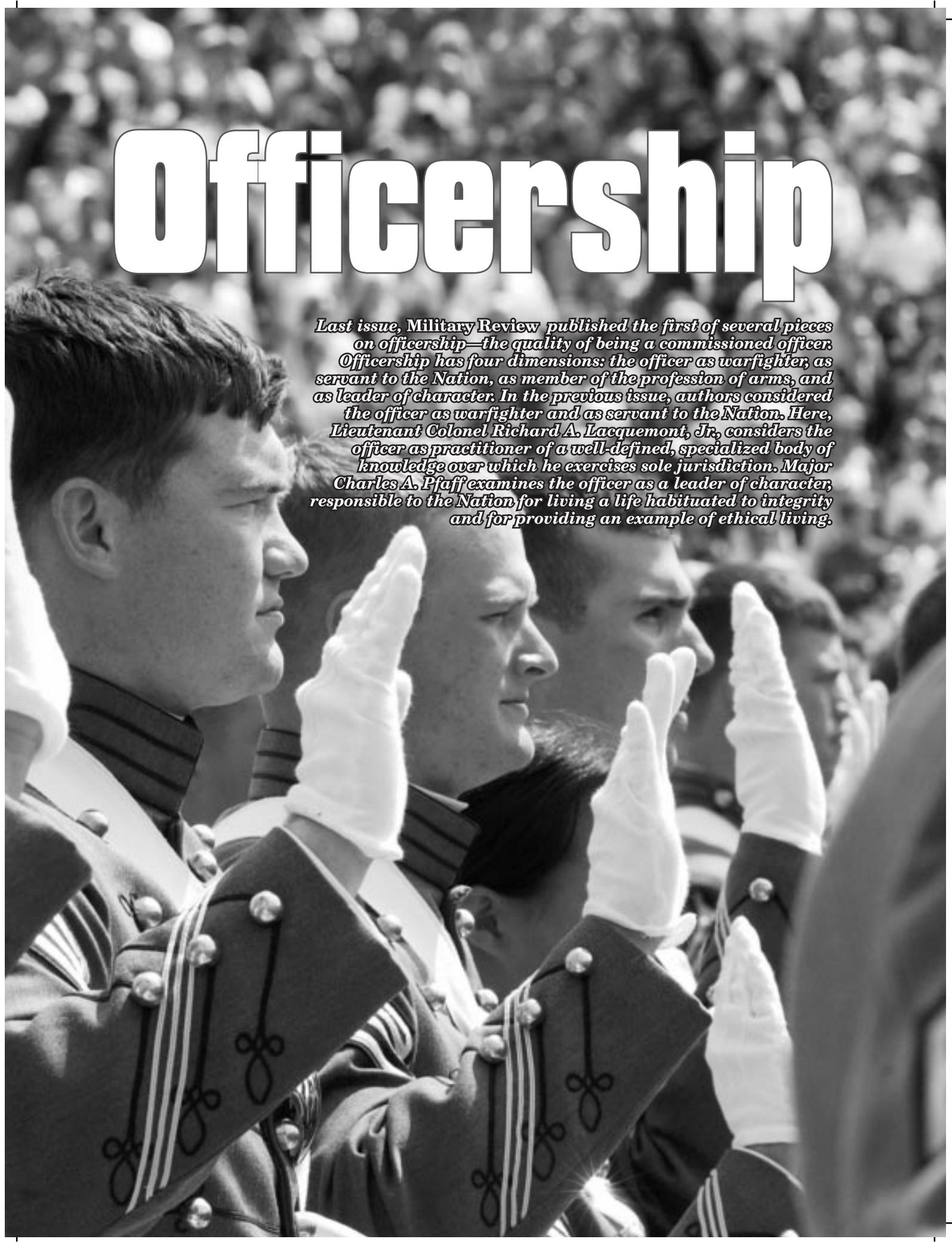
Last issue, Military Review published the first of several pieces on officership—the quality of being a commissioned officer. Officership has four dimensions: the officer as warfighter, as servant to the Nation, as member of the profession of arms, and as leader of character. In the previous issue, authors considered the officer as warfighter and as servant to the Nation. Here, Lieutenant Colonel Richard A. Lacquemont, Jr, considers the officer as practitioner of a well-defined, specialized body of knowledge over which he exercises sole jurisdiction. Major Charles A. Pfaff examines the officer as a leader of character, responsible to the Nation for living a life habituated to integrity and for providing an example of ethical living.

Understanding Professional Expertise and Jurisdiction

Lieutenant Colonel Richard A. Lacquement Jr., U.S. Army

JUNIOR LEADERS of the Army profession must understand the nature of Army professional expertise and be able to relate this expertise to appropriate professional jurisdictions. This article attempts to do three things. First, it presents a way to think about the abstract professional knowledge that the Army requires as an institution. Second, it links this institutional imperative to suggestions for the contours of the expert knowledge required by individual professionals. Third, it describes a logical way to connect this expertise to the jurisdictions of professional practice. This approach seeks to move beyond broad concepts of full-spectrum dominance to a framework that permits clearer definitions, distinct priorities, and sharper boundaries to guide professional practice and professional development.

Many recent studies about the future of the Army profession claim that there is significant tension about the future of the Army profession within the officer corps.[1] The dramatic changes in the international environment and the changing aspects of warfare associated with new technology and new techniques related to force transformation drives this tension. One of the most critical tasks facing the Army's strategic leaders is to define and clarify the expert knowledge that constitutes the Army's professional jurisdictions. Although the final decisions belong to senior civilian and military leaders, integrating new concepts throughout the profession requires the informed engagement of all officers. Officers must understand this critical component of the Army profession and participate in shaping the profession's future.

Full-spectrum dominance is a useful shorthand aspiration that glosses over the complexity of the varied demands the operational environment imposes on the Army as a whole and on individuals expected to operate along the entire spectrum of conflict with uniformly high competence. The spectrum of conflict and range of military operations is vast. Society might well require the Army to participate in all kinds of missions. The difficulty is that the Army, as well as its individual members, is not infinitely capable. There are limits on the capacity of the required choices. Limits include time, manpower, materiel, and a host of other factors. We must be careful not to become jacks-of-all-trades and masters of none. Everyone trying to do everything might lead to everyone doing nothing well. We already acknowledge that fighting and winning the Nation's wars is the highest priority. Taking the nonnegotiable contract from the U.S. Army Field Manual (FM) 1.04 series as the start point, we can identify other priorities at the nexus of expert knowledge and jurisdictions of practice.[2] We should be forthright in debating and negotiating these priorities. We owe society and the members of the profession this improved clarity as a step toward greater effectiveness.

The Army's Expert Knowledge

One of the first and most far-reaching tasks we must undertake is to clarify the nature of the profession's expert knowledge. Professionals are experts in an abstract body of human knowledge.[3] The quintessential characteristic of a profession is the exercise of judgment. A common description of military professional expertise is the management of violence.[4] I submit that this is no longer a useful phrase with which to describe military expertise. The term suggests management as the critical central expertise and obscures the more important role of leadership and the centrality of the human dimension of the profession. Leadership, not management, is the true core of the Army profession. A better definition would be, "The core expertise of American military officers is the development, operation, and leadership of a human organization, a profession whose primary expertise is the organized application of coercive force on behalf of the American people." In abbreviated form, "Expertise is leadership of Army soldiers in the organized application of coercive force."

Expertise, applicability and priority	Army unique	Military unique	Army specific application	General application (needed internally)	General application (needed externally)
Character of expertise	Core	Core	Core support	Acquired	Borrowed
How acquired	Army exclusive	Military exclusive	Army and society	Contract IN	Contract OUT
Developmental responsibility	Army	Military	Society with Army component	Society with Army quality control	Society
Certification	Army	Military	Army	Army and society	Society
Military Technical Expert Knowledge — Leadership of human organizations in application of coercive force	X (sustained land warfare)	X (general warfare)			
Combat	X				
Combat support	X				
Joint operations		X			
Combined operations		X			
Admin/Logistics			X		
Engineering/Science			X		
Information technology			X		
Human Development Expert Knowledge — Leadership			X		
Human behavior			X		
Physical fitness			X		
Education			X		
Combat medicine			X		
Family medicine				X	
Social work				X	
Moral-Ethical Expert Knowledge — Ethical standards	X	X			
Character development	X	X			
Legal			X		
Soldier spirituality				X	
Political Social Expert Knowledge — Advice on behalf of and representation of the profession	X	X			
Political negotiation			X		
Diplomacy (attaché)			X		
Resource acquisition and management				X	X
Other — Basic research					X

Figure 1. The four broad categories of Army expertise and specific areas of expert knowledge relative to the core expertise of leadership of soldiers in the organized applicaiton of coercive force.

Institutional-Level Professional Expertise

There are four broad categories of Army expertise: military-technical, human development, political-social, and ethical-moral.[5] These categories embody the expertise the Army profession requires to successfully fulfill its charter to American society. Figure 1 provides a draft map of the Army's expert knowledge and prioritizes specific areas of expert knowledge relative to the core expertise of leadership of Army soldiers in the organized application of coercive force.

The first priority is the Army's unique expertise in the employment of landpower. This is expertise that is not available anywhere else in American society. The Army has statutory responsibility for developing this capability, which fits within a broader set of skills and knowledge for which the Nation's military services are exclusively responsible. Counterparts of this core professional expertise also reside within the armed services of other nations. Concepts of joint and combined operations express this professional relationship.

Of secondary priority are areas of expertise more broadly available within civil society for which there are Army-specific applications. In these areas, the Army is not the sole or even primary source of professional development. Because of the specific ap-

plication of such expertise on behalf of the Army, however, there are specialized adaptations and applications that the Army must control. An excellent example of this is professional medical expertise. The medical profession provides the primary education and certification of medical professionals. The Army conducts additional education and development to focus on the peculiar demands of combat medicine and the application of military professional ethics to the practice of medicine in war and other military circumstances.

Areas of societally available expertise for which there are minimal, if any, adaptations required for application within the Army are the third priority. The routine need for such expert capability makes it appropriate to have it readily available and resident within the Army as an institution. Whether among special branch officers or civilian employees, the Army needs such expertise to function successfully.

The fourth and lowest priority is expertise not commonly required by the Army that others in society could provide. Rather than maintaining these skills internally, the Army can contract out for such expertise. Basic research is a good example of this.

Figure 1 shows various fields of expert knowledge as they relate to the Army's institutional priorities. The Army must develop, control, and certify expertise within the first priority (figure 1, first two columns). These areas of expertise are the responsibility of commissioned officers. The second priority (figure 1, third column) represents areas of specialized expertise adapted from a broader societal base. The adapting and applying of such expertise is best accomplished through special branch and midcareer specialization of commissioned officers intimately familiar with the profession's core expertise and responsibilities. The last two priorities permit broader latitude in acquiring expertise from society that helps meet the Army's overall objectives. The application of expertise in these areas must fall under the leadership of Army professionals who have mastered the Army's core expertise and are sufficiently well-versed in this external expert knowledge to provide effective liaison in applying such expertise to the Army's precise demands.

A lieutenant briefs his men before they begin training with local hospital staff in Strpce, Kosovo, 11 June 2002.

US Army

The relative importance of expertise . . . changes in the course of a professional's career. . . . Emphasis on political-social expertise increases later in an officer's career, especially in midcareer and in senior assignments.

Defining Individual Expert Knowledge

The Army needs both generalists and specialists to meet its needs. Generalists become the strategic leaders of the Army and must be familiar with most the major aspects of expertise that support core Army competencies.[6] In Officer Personnel Management System (OPMS) III, these are the officers in the operational career field. Specialists complement these generalists as experts in the various areas of abstract knowledge that support the Army's core skills. In OPMS III, some officers are career-long specialists who usually acquire their unique expertise before entering the Army. They include chaplains, lawyers, and doctors. Many officers will become midcareer specialists by joining the nonoperational career fields after extensive experience in the operational career field's basic branches.

Officers of the operational career field provide the core of the Army profession. These officers, from whom the institution draws future strategic leaders and midcareer specialists, need a broad education that supports all four categories of Army expertise.

The relative importance of expertise from the four categories changes in the course of a professional's career. There is greater emphasis on narrow tactical military-technical skills (tactics, techniques, and

Figure 2. Competitive jurisdictions of the Army profession.

principles [TTP]) early in an officer's career. As an officer's career progresses and the officer achieves positions of greater responsibility in tactical and operational units, emphasis shifts to broader principles of war and more complex judgments related to applying coercive force. Human-development expertise, such as leadership, aspects of psychology, and physical fitness, has greater relative importance in tactical assignments, particularly command. Emphasis on political-social expertise increases later in an officer's career, especially in midcareer and in senior assignments, including greater emphasis on coordination and interaction with units and individuals beyond an officer's immediate specialty. The importance of political-social expertise is even greater with respect to assignments at the nexus of civil-military interaction and liaison with armed forces of other nations. Similarly, requirements for ethical and moral expertise rise dramatically as rank and responsibility increase, particularly in command.

A key element of this broad treatment of Army expertise is the perishable nature of specific technical knowledge. Officers must understand the systems and weapons of the units they lead, but the most important professional knowledge they must master are the enduring, higher order demands for leadership and professional military judgment. This knowledge permits Army professionals to integrate specific skills and equipment, much of which is transitory, within solidly grounded frameworks of professional practice.

Principles of Army Education

Internally, the profession's educational priority is to inculcate virtues that support individual self-awareness and adaptation (metacompetencies noted by the Army Training and Leader Development Panel).[7] The Army's institutional efforts must focus on developing the broad capacity for individual pro-

fessionals to learn how to learn. Core educational programs must develop analytical capacity and critical reasoning skills. Secondary to this are the efforts to train individuals on specific skills and to impart detailed knowledge to meet short-term requirements. The goal is to create experts in the leadership of Army soldiers in the organized application of coercive force. The primary means to accomplish this are the professional military education system and the assignment process used to generate practical professional experience.

Professional-development systems must produce individuals to meet current and short-run challenges and to adapt to uncertain future challenges. Such a system must place less emphasis on particular perishable technical skills and place greater emphasis on qualities of enduring value (physical, spiritual, and ethical) and the capacity to learn and grow professionally throughout a lifetime of service to the Nation. Traditions that produce leaders who have simply mastered to higher degrees their predecessors' technical skills are likely to serve the Nation poorly. In an era of rapidly changing technology, mastery of particular weapons and equipment might provide only fleeting benefit. More important is intellectual strength and agility, which allow leaders to understand the dynamics of change and readily adapt to new capabilities to enduring requirements and to adapt old capabilities to new requirements. Ultimately, the value of any skill must relate to the touchstone of effective leadership of Army soldiers in the application of coercive force.

Practical implications include a greater emphasis on the Army Officer Education System to develop officers' analytical skill and to focus less on training for routine tasks that well-developed standards govern. Similarly, assignment must focus on latitude for officers to exercise professional judgment instead of being measured by successful completion of checklists and standard operating procedures admitting of only the most minimal creative adaptation. The Army must resist the temptation to rely on easily measured but often superficial indicators as a substitute for complex qualitative assessments of less tangible but more significant traits, which are valuable in achieving effectiveness in the most demanding environments, particularly combat.

Understanding Professional Jurisdictions

Army expertise should be directly related to legitimate professional jurisdictions. Professional jurisdictions are prioritized with respect to relevant expertise and legitimized by the profession's client. For the Army, this client is American society, as represented by its civilian leaders.

Jurisdictions must be negotiated with civilian leaders. The Army competes with other military services and civilian professions for authority in particular jurisdictions, which can be divided into six broad jurisdictions, four external to the Army and two internal. The four external jurisdictions are conventional war; unconventional war; stability and support operations; and homeland security. Developing expert knowledge and developing future professionals with warfighting expertise are two internal jurisdictions. Figure 2 depicts the Army's main competitive jurisdictions.[8]

The Army must fight to control or at least share control of jurisdictions in which its core expertise applies. Jurisdictions within which the Army should seek to sustain full and complete control include those related to the organized use of landpower in the application of coercive force on behalf of the State. This includes all elements of warfare involving ground combat (conventional war, unconventional war, direct liaison, and training with allied or coalition ground forces). This also includes missions such as peace enforcement and peacekeeping where the Army's role is to exercise organized coercive force to deter violence by other groups or to ensure their defeat if deterrence fails. In situations where the use of coercive force is unnecessary, the Army is also unnecessary. The Army should work to minimize its responsibility in such jurisdictions, with one important caveat: there are times when the Army's utility is not based on professional expertise, but on its disciplined, trained, and ready manpower that can operate in austere environments.[9] In such situations, expedience might demand the Army's short-term help. However, to provide such service does not require the Army to provide the related professional expert knowledge. For example, the Army might be an excellent source of manpower to provide emergency support to firefighters in surge operations. Firefighting should not, however, become an area of professional expertise for the Army profession. Army leaders should be content with a subordinate role.

In the end, civilian leaders make decisions about the Army's jurisdictions. Army leaders participate in this process by articulating clearly how the Army's capabilities and expertise can effectively serve society's needs. Conversely, Army leaders must articulate limits and establish priorities to help civilian leaders avoid overextension and misapplication of Army capabilities.

Meeting Society's Needs

The Army must have clearly understood jurisdictions for action, and it must have well-understood expertise to accomplish society's requirements within those jurisdictions. To make this possible, strategic leaders must ensure that educational and professional development processes match society's needs. In an era of war threats and continued demands for Army participation in stability and support operations, there is need for greater fidelity to build on the warfighting priority to establish relative priority among other areas of expertise. Moreover, warfighting is a complex endeavor that requires the application of expertise, some of which is available from American society at large, to support the Army's effective use of coercive force.

Army leaders must negotiate with society's civilian leaders to prevent drift and confusion about the profession's jurisdictions and expertise. Junior Army leaders must understand the priorities and limits of the Army's professional expertise. The Army needs professionals with the intellectual agility to understand the dynamics of change and to be able to readily adapt new capabilities to enduring requirements and old capabilities to new requirements. The Army will develop future strategic leaders of the profession from the ranks of its junior professionals. *MR*

NOTES

1. The tensions surrounding the future of the profession is a prominent point in reports by the Army Training and Leader Development Panel (ATLDP) and the Center for Strategic and International Studies (CSIS). See ATLDP, Officer Study: Report to The Army, on-line at <www.army.mil/features/ATLD/report.pdf>, May 2001, and CSIS, *American Military Culture in the 21st Century: A Report of the CSIS International Security Program* (Washington, DC: The CSIS Press, February 2000). See also Don. M. Snider and Gayle Watkins, eds., *The Future of the Army Profession* (New York: The McGraw-Hill Companies, Inc., 2002).
2. The U.S. Army Field Manual (FM) 1.04 series includes FM 1-04.0, *Legal Support to Operations* (Washington, DC: U.S. Government Printing Office [GPO]), 1 March 2000); FM 1-04-1, *Legal Guide for Commanders* (Washington, DC: GPO, 13 January 2002); FM 1-04.10, *The Law of Land Warfare* (Washington, DC: GPO, 15 July 1976); and FM 1-04.14, *Legal Guide for Soldiers* (Washington, DC: GPO, 16 April 1991).
3. Andrew Abbott, *The System of Professions: An Essay on the Division of Expert Labor* (Chicago: University of Chicago Press, 1988).
4. Samuel P. Huntington, *The Soldier and the State* (Cambridge: Harvard University Press, 1957).
5. See Snider and Watkins, chapter 1.
6. See FM 1.
7. ATLDP, *Officer Study Report*, OS-6.
8. Snider and Watkins, 8.
9. Leonard Wong and Douglas V. Johnson II, "Serving the American People: A Historical View of the Army Profession," in Snider and Watkins, 62.

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Officership:
Character, Leadership, and Ethical Decisionmaking

Major Charles A. Pfaff, U.S. Army

*What the bad man cannot be is
a good sailor, or soldier, or airman.*
— General Sir John Winthrop Hackett[1]

A PLATOON is on a rescue mission. Two members of the platoon are trapped on a hill and under fire. Both soldiers are seriously wounded; within a few hours, they will be dead. Between the platoon and the two soldiers is a minefield, which the platoon must breach or go around if they are to get to the trapped soldiers in time. As the platoon leader ponders his options, he notices a civilian picking his way through the minefield. Obviously he knows where the mines are. The lieutenant detains the civilian, but the man refuses to lead the platoon through the minefield. The lieutenant offers several enticements to get the man to cooperate, but the man continues to refuse. There is no way he is going back through that minefield.[2] The lieutenant must make a decision that he had hoped to avoid. There are rules for situations like this, but if he follows them, good men will die.

Inspiration

Officership is about inspiration, but good officers do more than inspire subordinates to do extraordinary things. They know what things to do and when to do them. They also set goals and convince people to spend time, effort, and other resources to achieve them. Doing this well involves making practical as well as ethical decisions. Sometimes, situations will create a tension that is not easy to resolve. When officers attempt to balance the demands of morality with the demands of the profession, they must consider the consequences of their decisions and the rules and principles that govern the profession. Ethical considerations by themselves, however, do not provide a complete approach sufficient to answer all of the moral questions that confront officers.

U.S. Army doctrine defines the traits of good officership within the framework of be, know, do, which incorporates ethical as well as practical aspects.[3] Because of this, we can discuss an ethics of being, an ethics of knowing, and an ethics of doing. Why approaches based on consequences and rules are inadequate is because they focus on the ethics of knowing and doing but exclude the ethics of being. Yet, being a certain kind of person is just as important to moral leadership as knowing consequences, rules, and principles and being able to apply them in ways that serve the profession and the Nation. This is because consequences and rules can come into conflict. When this happens ethical algorithms based on measuring consequences and applying rules will be insufficient to resolve the tension in a morally appropriate way. In such instances, it will be an officer's character that will help resolve conflicts in a consistent, coherent manner.[4]

Character

The lieutenant in the scenario has a choice. He can torture or threaten to torture the civilian into cooperating, or he can decide to not torture or threaten to torture the civilian and effectively leave his men to die. Unfortunately for the lieutenant, the decision is not a simple one. If he chooses the first option, he violates the law of war. If he chooses the second option, he will have directly contributed to his men's deaths.

Deciding what to do is complicated; there is no clear way to choose one over the other. Preserving the lives of his men and accomplishing his mission are moral imperatives of considerable force. Yet, so is keeping the promise he made to uphold the Constitution, which includes abiding by the provisions of treaties to which the United States is party.[5] Resolving this problem will not depend on clever rationalizations or skillful manipulation of rules. Whether or not the lieutenant resolves this situation well depends

on the kind of person he is. To demonstrate this it is necessary to examine why appealing to consequences—like accomplishing missions and preserving lives—and simple conformity to rules is inadequate to account for every moral consideration.

Most ethical decisions are easy to make. For the most part, as long as officers meet the expectations of their subordinates and superiors and stay within the rules, everyone will consider them as ethical leaders, but as the above example shows, this is not always the case. To understand why, it is necessary to discuss the importance, as well as the limits, of consequences and rules in ethical decisionmaking.

Military necessity and the laws of war. The ethics of consequences seeks to determine whether a particular action maximizes some nonmoral good, such as happiness or pleasure, or minimizes some nonmoral harm, such as misery or pain. While choosing any particular objective is not in itself a moral choice, soldiers still have a prima facie moral obligation to accomplish their assigned missions. Thus, when making moral decisions, officers weigh consequences in terms of whether a course of action maximizes their chance of victory or lessens it.

Since maximizing victory includes minimizing the risks to soldiers so that they can continue the war effort, any course of action that directly contributes to mission accomplishment or that reduces risk to soldiers will be morally justifiable. In fact, if military necessity were the only consideration, then such acts would be morally obligatory, regardless of what action is taken. If this were true, then the lieutenant would be free to disregard the laws of war and to torture the civilian. In fact, he would never have to consider the laws of war in the first place. But, he is obligated to take such laws seriously. By accepting his commission he has promised to abide by treaties to which the United States is a party. Thus, regardless of how he feels about the law and morality of war, as a commissioned officer he has a moral obligation to uphold.[6] In this case, military necessity comes into direct conflict with this obligation. Always deciding in favor of military necessity would thus undermine an officer's ability to make promises. Promise-keeping is an essential part of maintaining one's integrity. A policy that undermines an officer's integrity, when pursued as a general policy, corrupts the profession.

To claim that in the case of such situations a good officer always abides by the rules would be easy, but simply asserting this will not help resolve the moral difficulties that arise when military necessity and the war convention come into conflict. Nor should the lieutenant unquestioningly follow the rules. There are a number of problems with any rule-based approach to ethics. Therefore, for the lieutenant to ask why rules should take precedence over the lives of his men is reasonable. He must also ask himself if he wants to be the kind of officer who allows his men to die or to fail in their mission just to conform to a rule.[7] Sometimes the answer to that question will be "yes," but not always. Deciding when that is the answer is the primary task of officership.

Character, leadership, and ethical decisionmaking. There is a gap between the kinds of ethical questions officers confront and the kinds of answers that consequence and rule-based approaches

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An officer of character is more concerned with being the kind of person who does the right thing, at the right time, in the right way, and is not as concerned with the act itself. The ethics of character avoids most dilemmas because the focus is no longer on deciding between two unfortunate outcomes or two conflicting rules but on being a certain kind of person.

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can give. When considerations of military necessity are insufficient and rules fail, what the lieutenant does depends ultimately on the type of person he is. Thus, it is important to develop officers of character who understand what it means to be good officers—not just what it means to follow rules, perform duties, or reason well, although these are important to being ethical.

If officers are to have the resources necessary to make ethically sound decisions, they need an approach to ethics that articulates what good character is and how it can be developed. Moral philosophers usually refer to the ethics of character as virtue ethics. This approach to ethics seeks to determine systematically what kind of traits good people (good officers) should possess, what it means to possess these traits, and how people can come to possess these traits. In this context, virtues are the traits of good character.

An officer of character is more concerned with being the kind of person who does the right thing, at the right time, in the right way, and is not as concerned with the act itself. The ethics of character avoids most dilemmas because the focus is no longer on deciding between two unfortunate outcomes or two conflicting rules but on being a certain kind of person. Virtuous officers do not assign values to outcomes or preferences to duties. Virtuous officers have habituated dispositions that make them the kind of people who do the right thing, even in the complicated and dynamic environment of modern military operations.

> *[The lieutenant's] only requirements are to stand at the head of the line and make sure everyone gets fed. [But] if he knows why he is to stand at the front of the line, he will become a more caring person, for he should begin to notice anything that is not being done correctly. For example, the cooks might be giving out unusually small portions; the food might not be cooked as well as it should or could be; or the food might lack variety from day to day. There is nothing in the rule that requires him to do anything about these things.*

The virtues of good officership. In virtue ethics, the virtues are determined by understanding the purpose something serves.[8] Knowing something's purpose reveals if something is functioning well or poorly. For example, if the purpose of pack animals such as mules is to bear burdens, their actions reveal which mules do better and which do worse. And, we can tell what qualities a mule must possess, such as strength, surefootedness, and endurance, to do its task well. To the degree a mule possesses these traits, the better the mule is.

A human being must also have certain characteristics to be a good human being. Aristotle claimed that the virtues of the excellent person included courage, temperance, liberality, proper pride, good temper, ready wit, modesty, and justice.[9] Plato listed prudence, courage, temperance, and justice.[10] Thomas Aquinas added faith, hope, and love.[11]

Because what it means to function well for a human is much more complex than what it means to function well for a mule, defining "functioning well" is difficult. Part of the problem is that a complex combination of biology, environment, culture, and tradition determines what it means to function well. What this complex combination is and how its components relate to each other are not always well understood and, therefore, are subjects of much debate.

The function, environment, culture, and traditions of the military are well understood, however. The military's function is to defend the Nation. This function is itself a moral imperative of the State. Also, officers have the added functions of setting goals and inspiring others to achieve them to serve this purpose. Not only does this allow us to determine the virtues of the good military leader, it provides a way to morally justify them as well. This gives a clear framework for discussing the character of morally good leadership.

Given this function, one can determine some of the virtues that are associated with officership, including selflessness, courage, prudence, caring, and integrity.[12] If officers must establish goals and methods of defending the Nation, they will need to be prudent and selfless. The former is necessary to discern the proper ends, and the latter is necessary to mediate when proper ends conflict with self-interest. Officers require courage, caring, and integrity to inspire and direct others to achieve these goals.

Having decided what the virtues of good officership are, it is necessary to discuss what it means to act virtuously. Virtues are excellences of character; that is, they are dispositions toward certain behaviors that result in habitual acts.[13] Aristotle viewed each virtue as a mean between the two extremes (vices) of excess and deficiency in regard to certain human capacities. For example, with regard toward feelings of fear, courage is the mean. A person can feel too much fear and be cowardly or feel too little fear and be foolhardy. A person, who runs in the face of danger when the proper thing to do would be to stand his ground, is a coward. But the person who does not comprehend the danger he is in is also not courageous. This works the same way for other virtues as well. With regard to selflessness, one extreme is careerism, where officers are too concerned with personal advancement and fail to place the needs of the organization above their own. An officer can also be too selfless. Officers who never take care of personal interests might impede their ability to lead. For example, officers who deny themselves sleep, so as to demonstrate their commitment to the mission, quickly become incapable of making good decisions.[14]

Neither is the mean an average. For instance, 10 pounds of food might be too much, and 2 pounds might be too little, but this does not mean that the average of 6 pounds is the right amount. Instead, the mean is relative to our nature. It is worth emphasizing that for Aristotle the mean is only aimed at because it is beneficial; the mean between two extremes enables the individual to live well.

To discern what the mean is an officer must develop the ability to reason well, which is itself a virtue that Aristotle called prudence or practical wisdom. This virtue is necessary to resolve the tension between the feelings that emerge from natural appetites, concerns of self-interest, and the requirements of virtue.[5] The conflict between reason, feeling, and self-interest lies at the heart of the excellences or virtues. What drags us to extremes detrimental to our long-term happiness are passions and feelings, such as excessive (or defective) fear or excessive love of pleasure. Reason is required to control behavior, passions, and feelings. Excellencies are applications of reason to behavior and emotion. These excellencies can be developed with proper training.

Virtue ethics allows us to take into account consequences, rules, duties, and principles in a way that resolves the tension inherent among them. As in consequence-based ethical theories, we must be concerned with consequences of an action to determine its normative value. In virtue ethics, one must be sensitive to the conditions that frame moral choices. Acting on the principle of always telling the truth is good, but ignoring how that truth might affect others risks doing moral harm. For example, a caring husband should bring to his wife's attention conditions that negatively affect her health. A vicious (or at least stupid) husband will simply announce that she is fat. Determining how to instantiate a particular virtue requires an element of compassion. Instantiating a virtue without being compassionate can result in disastrous consequences.

Rule- or duty-based ethics evaluate actions in terms of how these actions correspond to certain rules or principles. In duty-based ethics one has an obligation to perform certain duties conscientiously. In virtue ethics one must habituate and instantiate a virtue conscientiously.[16] As such, the habituation of virtue can take on the qualities of a duty. To develop integrity, for example, one must always tell the truth and always avoid lying.

Virtues are also beneficial to the possessor. Someone who is courageous has a better chance of succeeding than someone who is cowardly, for that person will persevere. Someone who is selfless exercises self-control and would in most circumstances be happier and healthier because of not allowing personal gain to divert him from important long-term projects, such as passing an inspection or carrying out a long-term training plan.

Developing the virtues of good character. A virtue-ethics approach to officership can help resolve certain dilemmas that consequence- and rule-based theories cannot. Instead of doing good things, the virtuous person focuses on being good. How one becomes good is by acquiring certain virtues or character traits that lead to doing virtuous things. This is, however, where rule-based approaches can play a key role.

Virtues do not develop overnight. One cannot wake up one day and decide to be courageous, for example, and immediately be so. Being virtuous means knowing the right time, place, circumstance, and manner in which to be courageous. One acquires these traits by habituation. According to Aristotle, whose writings influence modern virtue theory, one becomes virtuous only by performing virtuous actions until doing so becomes habitual. In other words, experience is necessary. Aristotle makes this point by contrasting virtues with natural capacities: "Of all the things that come to us by nature we first

acquire the potentiality and later exhibit the activity (this is plain in the case of senses; for it was not by often seeing or often hearing that we got these senses, but on the contrary we had them before we used them, and did not come to have them by using them); but the virtues we get by first exercising them, as also happens in the case of the arts as well. For the things we have to learn before we can do

> *Aristotle viewed each virtue as a mean between the two extremes (vices) of excess and deficiency in regard to certain human capacities. For example, with regard toward feelings of fear, courage is the mean. A person can feel too much fear and be cowardly or feel too little fear and be foolhardy.*

them, we learn by doing them, e.g., men become builders by building and lyre players by playing the lyre; so too we become just by doing just acts, temperate by doing temperate acts, brave by doing brave acts."[17]

So, just as one becomes a good musician only by practicing an instrument, one becomes a good officer only by practicing the profession. But, how does one who has no experience in such matters develop experience? When we try to describe a virtue, we tend to list the things we must do to instantiate the virtue. Listing these things is just like listing rules and principles. This is, in fact, one of the major problems with a virtue approach. When we try to put rules and principles into practice, we end up with what appears to be essentially a rule-based system. When this happens, the importance of character is not obvious.

To get a deeper understanding of what character is as well as how its virtues are best cultivated, consider the following example. To make his subordinates caring officers, a brigade commander made the rule that an officer's place is at the front of the mess line to ensure that everyone gets fed. The officer is to eat last. When the commander found one lieutenant at the end of the line, he immediately corrected the situation.[18] When the lieutenant first stood at the head of a line, he was simply following a rule. If rules were the sole determinants of right and wrong, then the lieutenant was doing what was right. This is good as far as it goes, but this will not make him a better lieutenant. If he knows why he is to stand at the front of the line, he will become a more caring person, for he should begin to notice anything that is not being done correctly. For example, the cooks might be giving out unusually small portions; the food might not be cooked as well as it should or

could be; or the food might lack variety from day to day. There is nothing in the rule that requires him to do anything about these things. His only requirements are to stand at the head of the line and make sure everyone gets fed. But, since he knows that this rule is supposed to make him a more caring person toward his soldiers, he is motivated to act to correct these things.

This might seem like a simple, inconsequential example, but this same dynamic works in many situations. At first, the junior officer is following rules; later, after doing it long enough with a properly critical and creative attitude, he makes a transition to where he is actually disposed to be caring. Once this happens, he is no longer simply following rules. He has actually developed the capacity to make them. What motivates him to adopt this attitude is an understanding that it is not enough to do good, it is just as important to be good.

Aristotle also points out that one cannot develop virtue by accident or by doing the right thing for the wrong reasons. The lieutenant in the above example might be motivated by self-interest because he knows the brigade commander will give him high marks for being so conscientious. This is why intent is important. One simply cannot become caring or wise or honest unless one is trying to become so. For an action to be truly virtuous, a person must be in the right state of mind. He must know that his action is virtuous, and he must decide on it for the sake of his soldiers. He must act in a caring manner because being caring is good, not because it will benefit his career.

Mentorship

If rules have a role in habituating virtue, it is critical that the person making the rules possesses that virtue. In this way, the rules are not arbitrary but, instead, become a path one can take to becoming a good officer. Aristotle likened the acquiring of virtues to playing an instrument, which requires a teacher and habitual practice. Unless one is a savant, one does not pick up a guitar and by fooling around with it, play it. One might, after a fashion, be able to make pleasant sounds with it, but without someone to provide training, developing true proficiency will be long and arduous; fraught with mistakes; and certainly not efficient. One might even pick up a book and learn the principles of good guitar playing. Those who have tried that method know that doing so might make them better to an extent, but it takes a good teacher to really train them in how to achieve excellence.

For junior officers to become good officers, they must acquire the necessary virtues. Junior officers can learn from seeing how virtues are instantiated by those who are effective at moral officership. Only then can they instantiate virtues into their own lives. Virtues involve a delicate balancing between general rules and an awareness of particulars. In this process, the perception of the particular takes priority, in the sense that a good rule is a good summary of wise particular choices and not a court of last resort. The rules of ethics, like rules of medicine, should be held open to modification in the light of new circumstances. The good officer must cultivate the ability to perceive, then correctly and accurately describe his situation and include in this perceptual grasp even those features of the situation that are not covered under the existing rule. The virtues provide a framework around which officers might engage in this process.

Resolving the dilemma. In resolving his problem, our virtuous lieutenant will understand that he cannot instantiate one virtue, such as caring, by failing to instantiate another virtue, such as integrity. In any particular situation, the virtuous person acts in such a way that he instantiates all of the relevant virtues. The lieutenant might decide that it is better to save his men at the expense of fulfilling his duty to obey lawful orders, but he will understand that he cannot be caring at the expense of his integrity. He will understand that somehow he must maintain or restore it. He will understand that to be virtuous, he must publicly take responsibility for his actions and the bad consequences those actions might have. To prevent or mitigate the bad consequences he might turn himself over to his superiors or resign from his position. This would send the message to his subordinates that what he did might have been necessary, but it was not good. If he were only obligated to consider military necessity, he would actually be able to conclude that torturing the civilian was a morally obligated act if he concluded that rescuing his men maximized military necessity. Virtue ethics allows him to conclude that this might be the morally best course of action, but not that the results of the action are morally good.

Could the lieutenant be virtuous and allow his men to die? Only if there were a way to instantiate caring if he did so. He might consider the harm he could cause to the civilian's family if the enemy discovers the civilian's cooperation. To achieve the greater good, the lieutenant might find that he, as leader, would have to bear the moral costs of his decision. He might consider resigning his position if it is the only way he can restore his integrity after having failed in the commitments he made to his men. What things he considers and how he considers them will result from the virtues relevant to the situation. If he were simply following the rules, he would have to conclude that letting his men die is the right thing to do, regardless of extenuating circumstances.

Offering a definitive virtuous solution is difficult

because there really is none, at least not in the same sense that consequence- or rule-based systems offer. Such approaches attempt to determine what the right action is in a particular situation. They are intended to be formulas that when all of the relevant variables are put into the equation, the right answer pops out. They are not always up to the challenge, however. While virtue ethics does not offer a formula, it offers a way of developing officers and subordinates in a manner that will provide the widest possible variety of resources to draw on to make the best ethical decisions in the moral crucible of the modern battlefield.

Potential to do Good or Evil

In the complex, dynamic, and dangerous environment of the modern battlefield there is great potential to do evil and little time to apply rules or to calculate consequences to avoid doing evil. Even if there were, such one-dimensional approaches to ethics are not always up to the challenge. Rules, duties, and principles can conflict. Sincere, well-intentioned compliance can sometimes lead to the most disastrous outcomes. But acting in such situations does not necessarily make someone a bad person.

Actions might be evidence of the presence or the absence of virtue, but they are not in themselves virtuous. Acting virtuously might not spare one from the moral costs of leadership, but doing so provides a framework in which one can maintain one's integrity as well as the integrity of the pro-

> *Aristotle likened the acquiring of virtues to playing an instrument, which requires a teacher and habitual practice. Unless one is a savant, one does not pick up a guitar and by fooling around with it, play it. . . . For junior officers to become good officers, they must acquire the necessary virtues. Junior officers can learn from seeing how virtues are instantiated by those who are effective at moral officership. Only then can they instantiate virtues into their own lives.*

fession. This is why developing the virtues of good officership is so important for the military officer. In situations where any action can lead to a morally impermissible outcome, it will be officers of character who will be best able to resolve the tension and maintain their own integrity and the integrity of the profession as well.

Character is an essential part of an ethical framework for officership. When officers face the kind of situation the lieutenant did, it is the character they have habituated that will guide their actions. This does not mean that virtuous officers never consider consequences or rules to determine where their duties lie. The point is that the virtuous officer has developed the disposition to know how and when to do so in the best way possible. **MR**

NOTES

1. GEN Sir John Winthrop Hackett, "Military Service in the Service of the State," *The Harmon Memorial Lectures in Military History* (U.S. Air Force Academy, CO: U.S. Government Printing Office [GPO], 1970).
2. This scenario is based on an actual event that occurred during the Vietnam war. See Anthony E. Hartle, *Moral Issues in Military Decision Making* (Lawrence: University of Kansas Press, 1989), 2-3.
3. U.S. Military Academy Circular 1-101, *Cadet Leadership Development System* (West Point, NY: June 2002), 1.
4. For a discussion on the importance of consistency and coherence in ethical decisionmaking, see Donald M. Snider, John A. Nagl, and Charles A. Pfaff, *The Army Profession: Officership and Ethics in the 21st Century* (Carlisle, PA: U.S. Army War College, Strategic Studies Institute, 1999).
5. Department of the Army Field Manual 27-10, *The Law of Land Warfare* (Washington, DC: GPO, 1956, change 1, 15 July 1976), 6-7.
6. Military realists believe that in war there are no moral norms. Given the commitments officer make to honor the treaties to which the United States is part of as well as to the ideals the Constitution invokes, this view is incompatible with commissioned service.
7. For a more complete discussion of why rule- and duty-based ethics do not form complete ethical approaches, see Charles A. Pfaff, *Virtue Ethics and Leadership*, unpublished presentation to the Joint Services Conference on Professional Ethics, available on-line at <www.usafa.af.mil/jscope/JSCOPE98/PFAFF98.htm>. See also Julius Moravcsik, "On What We Aim At and How We Live" in *The Greeks and the Good Life*, ed., David Depew (Fullerton, CA: California State University, 1980), 199.
8. Aristotle believed that a human being's function is to reason. Human beings who reason well will also live well because they are the best human beings they can be.
9. Aristotle, *Nicomachean Ethics*, trans., Terence Irwin (Cambridge, UK: Hackett Publishing Company), Book IV.
10. Plato, *Laws*, trans., A.E. Taylor, 1.631d, 12.965d, and *Republic*, trans., Paul Shorey,

4.427e, 433, in *Plato: The Collected Dialogues,* eds., Edith Hamilton and Huntington Cairns (New Jersey: Princeton University Press, 1961).
11. Arthur F. Holmes, *Ethics: Approaching Moral Decisions* (Leicester, England: InterVarsity Press, date unknown), 119.
12. My use of selflessness here is synonymous with the idea of public virtue. See Forrest McDonald, *Novus Ordo Seclorum: The intellectual Origins of the Constitution* (Lawrence: University Press of Kansas, 1985), 71. See also James M. Stockdale, *Thoughts of a Philosophical Fighter Pilot* (Stanford, CA: Hoover Institution Press, 1995), 75.
13. Distinguishing between what Plato and Aristotle referred to as practical wisdom *(phronesis)* and philosophical wisdom *(sophia)* is important. Practical wisdom expresses itself in the prudent conduct of one's public and private business. This virtue, also often called prudence, is distinguished from the theoretical wisdom of the philosopher. In the context of the discussion of leadership, Plato, in *Laws*, discusses what qualities a good legislator should possess and claims that a good legislator relies on prudence to determine what laws to enact. Since good laws achieve good ends, the good legislator must discern both the good end and the means to the good end.
14. Louis Pojman, *Ethics: Discovering Right and Wrong* (Albany, NY: Wadsworth Publishing Co., 1999), 163.
15. Jonathan Shay, *The Invisible Gap: Ethical Standing for Commander Self-Care.* Paper presented at the Joint Services Conference on Professional Ethics, National Defense University, Fort McNair, Washington, DC, 30-31 January 1997.
16. See *Nicomachean Ethics*, Book II.
17. James Wallace, *Virtue and Vices* (Ithaca, NY: Cornell University Press, 1978), 90.
18. *Nicomachean Ethics*, Book II, 1103a27-1103b1.
19. Personal conversation with BG Ray Miller, U.S. Army, Retired, Palo Alto, CA, 1 November 1996.
20. Augustine, *On Free Choice of the Will*, trans., Anna S. Benjamin and L.H. Hackstaff (Indianapolis, IN: Bobbs-Merill, 1964), 1.

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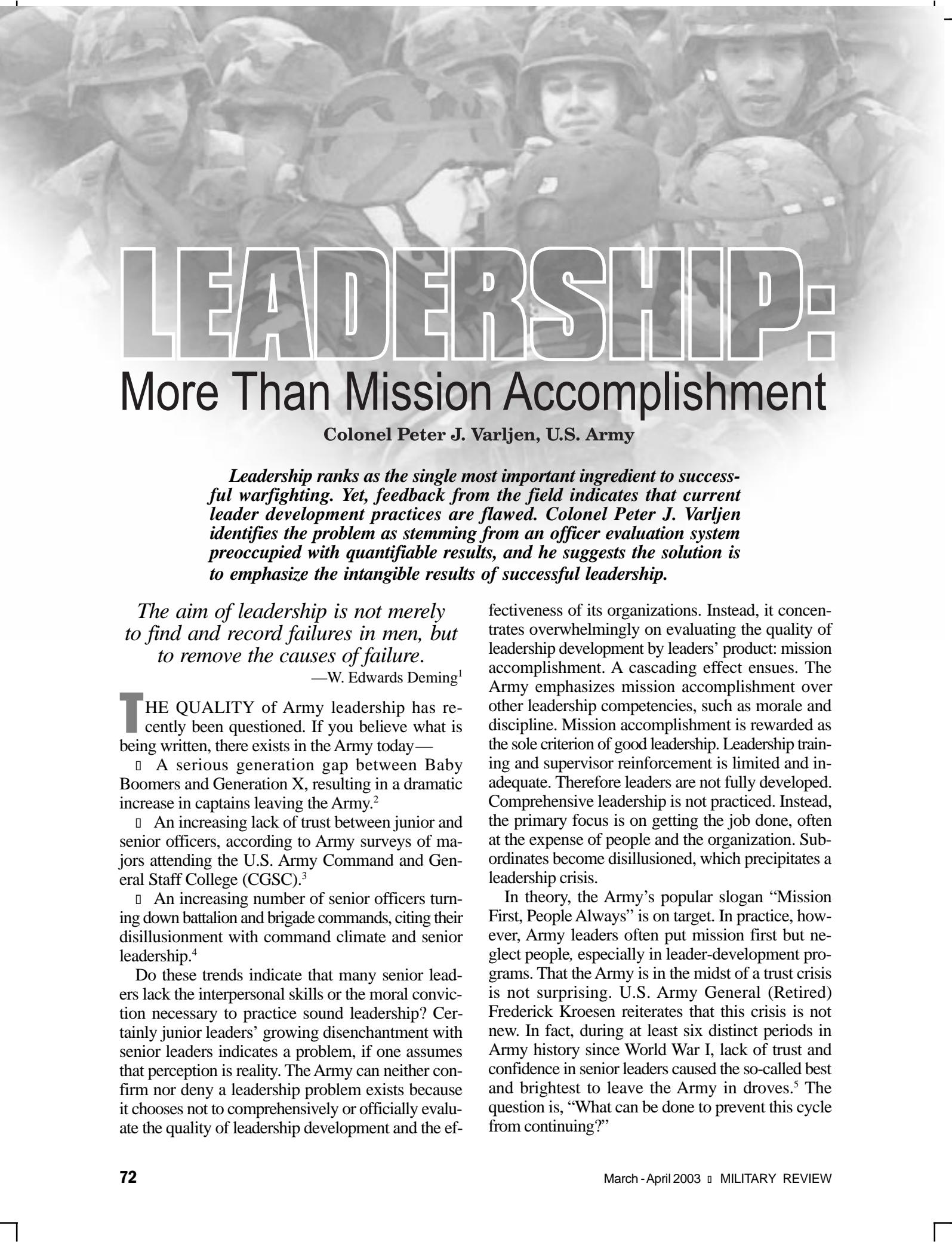
LEADERSHIP:
More Than Mission Accomplishment

Colonel Peter J. Varljen, U.S. Army

Leadership ranks as the single most important ingredient to successful warfighting. Yet, feedback from the field indicates that current leader development practices are flawed. Colonel Peter J. Varljen identifies the problem as stemming from an officer evaluation system preoccupied with quantifiable results, and he suggests the solution is to emphasize the intangible results of successful leadership.

The aim of leadership is not merely to find and record failures in men, but to remove the causes of failure.
—W. Edwards Deming[1]

THE QUALITY of Army leadership has recently been questioned. If you believe what is being written, there exists in the Army today—

⬜ A serious generation gap between Baby Boomers and Generation X, resulting in a dramatic increase in captains leaving the Army.[2]

⬜ An increasing lack of trust between junior and senior officers, according to Army surveys of majors attending the U.S. Army Command and General Staff College (CGSC).[3]

⬜ An increasing number of senior officers turning down battalion and brigade commands, citing their disillusionment with command climate and senior leadership.[4]

Do these trends indicate that many senior leaders lack the interpersonal skills or the moral conviction necessary to practice sound leadership? Certainly junior leaders' growing disenchantment with senior leaders indicates a problem, if one assumes that perception is reality. The Army can neither confirm nor deny a leadership problem exists because it chooses not to comprehensively or officially evaluate the quality of leadership development and the ef-

fectiveness of its organizations. Instead, it concentrates overwhelmingly on evaluating the quality of leadership development by leaders' product: mission accomplishment. A cascading effect ensues. The Army emphasizes mission accomplishment over other leadership competencies, such as morale and discipline. Mission accomplishment is rewarded as the sole criterion of good leadership. Leadership training and supervisor reinforcement is limited and inadequate. Therefore leaders are not fully developed. Comprehensive leadership is not practiced. Instead, the primary focus is on getting the job done, often at the expense of people and the organization. Subordinates become disillusioned, which precipitates a leadership crisis.

In theory, the Army's popular slogan "Mission First, People Always" is on target. In practice, however, Army leaders often put mission first but neglect people, especially in leader-development programs. That the Army is in the midst of a trust crisis is not surprising. U.S. Army General (Retired) Frederick Kroesen reiterates that this crisis is not new. In fact, during at least six distinct periods in Army history since World War I, lack of trust and confidence in senior leaders caused the so-called best and brightest to leave the Army in droves.[5] The question is, "What can be done to prevent this cycle from continuing?"

Field Manual (FM) 22-100, *Army Leadership,* strongly emphasizes mission accomplishment as a leader's key responsibility.[6] The FM quotes General Douglas MacArthur's warning that "our mission... is to win our wars. . . . There is no substitute for victory; that if you lose, the nation will be destroyed."[7] Yet, unlike earlier versions, FM 22-100 equally emphasizes that "being *just* technically and tactically proficient may not be enough [and] that the Army would need leaders of competence and character who not only acted to accomplish their mission but also acted to improve themselves, their leaders, their unit, and achieved excellence."[8] This new balance acknowledges the Army's repeated failure to emphasize adequately the full spectrum of leader attributes, skills, and actions, and it provides a good first step toward correcting this deficiency. But, does it go far enough?

The Army's leadership model relies on the three fundamental tenets of Be, Know, Do. These, in turn, rest on nine supporting pillars of values; attributes; character; knowledge; experience-based training; counseling and mentoring; mission accomplishment; organizational effectiveness (OE); and leader development. Leadership, similar to a physical structure, will only stand firm if its supporting pillars or foundation remain solid. Previous and current senior Army leaders have failed to institute this holistic approach to leadership. Army chiefs of staff have claimed that leadership is key to military success, but they have failed to recognize that unless all of the competencies are solidly developed, the Army leadership structure will collapse. Periodic neglect of multiple leadership pillars has caused cyclical leadership crises. Unless the Army corrects the problem, change will be excruciatingly slow. Failure could mean the loss of at least one generation of effective future leaders and possibly a return to the hollow army.

Measuring Leadership Effectiveness

FM 22-100 defines leadership as "influencing people—by providing purpose, direction, and motivation—while operating to accomplish the mission and improving the organization."[9] Yet, if we review most individual evaluation reports, all we find are citations of easily quantifiable tasks—mission accomplishment. We see little mention of more unquantifiable aspects of leadership—contributions regarding purpose, direction, motivation, leader development, and overall organizational improvement.

Admittedly, these soft aspects of leadership are not easily evaluated. How can we reliably measure

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a commander's effectiveness in counseling and developing leadership skills in subordinates when the results might not manifest themselves for years? How can we measure a leader's impact on organizational effectiveness and morale when leaders rotate quickly? How can we measure subordinates' trust and confidence in their commander at the time a commander's evaluation is due? So we say, "Good leaders will always accomplish the mission." Yet, history provides many examples of poor leaders who accomplished the mission. In the meantime, captains are leaving the service while resident CGSC students and those declining command indicate they have lost faith in senior leaders, despite those leaders' impressive records of mission success.[10]

We cannot sustain an army at peak operational capability by focusing solely on mission accomplishment. The long-term effectiveness and efficiency of units and the fullest development of leaders require that the Army develop some way to evaluate less quantifiable measures of leader competence. U.S. Army General Bruce Clark's adage, "An organization does well only those things the boss checks," surely applies to leadership processes.[11] Until Army leaders begin rewarding intangible indicators of effective leadership, current priorities and behaviors will not change.

Evaluating Leadership

In a recent Officer Evaluation Report (OER) update, Army Chief of Staff General Eric K. Shinseki noted that "selection boards clearly indicate that the OER is giving [the board] what they need to sort through a very high quality officer population and select those with the greatest potential to lead our soldiers.[However,] feedback from the field indicates the OER is not yet meeting our expectations as a leader development tool."[12] Can there be any more reliable admission that the officer evaluation system indicates neglect of essential elements of leadership development?

The current OER does not adequately measure the entire spectrum of leadership competencies that FM 22-100 outlined. The only portions of the OER that receive any credibility are the rater's and the

senior rater's evaluation on "specific aspects of the performance and potential for promotion."[13] These narratives focus largely on quantifiable aspects of mission accomplishment. Because most promotion or selection boards have so little time to evaluate each record, they almost exclusively consider the senior rater's rating over the rater's, who in a majority of cases knows the individual better. The expediencies of the review process, a process that is

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further exacerbated by attempts to normalize the rating across a bell curve or center-of-mass profile, dilute even the narrow evaluation. While the current OER appears to reduce evaluation inflation, it is a poor substitute for honest, well-rounded feedback on all leadership competencies.

Although the new OER attempts to evaluate an officer's character and how well he or she reflects Army values, it reduces the report to a go or no-go evaluation. Moreover, this go/no-go assessment contributes to junior officers' perception of a zero-defect Army because there is no recovery from a no-go check. In "Military Leadership into the 21st Century: Another 'Bridge Too Far'?," U.S. Army Lieutenant General (Retired) Walter F. Ulmer, Jr., asserts: "The Army does not enforce guidelines about leadership style except at the extreme edge of the acceptable behavior envelope [and thus] permits a potentially unhealthy range of leader behaviors."[14] Does the Army believe that officers enter active duty either with or without honor, integrity, courage, loyalty, respect, selfless-service, and sense of duty? Do not officers possess degrees of each? Cannot these values be taught, learned, and developed? Does someone deficient in these areas have the opportunity to learn from his or her mistake, to become stronger and more reliable than someone who has never been tested? The Army's current evaluation form does not address these questions, much to the detriment of the profession and its integrity.

The Army's definition of leadership, which emphasizes improving the organization, creates unnec-

essarily an ethical dilemma and implies that maintaining the excellence of an organization is not enough. Stating that all organizations must be improved is unrealistic and, at OER time, encourages creative interpretation to reflect significant improvements. Efforts to demonstrate endless improvement serve only to compromise the integrity of everyone involved.

The fixation on superlative ratings—"the absolute best of six battalion commanders"—leads to a self-centered, on-my-watch mentality. Such judgments naturally tend to address a commander's ability to accomplish the mission, often at the expense of the organization and its people. This focus is further exacerbated during short tours when making a mark is often valued over the organization's best long-term interests.[15] This practice persists because organizational effectiveness, leader development, and command climate are not accounted for in rating a leader's performance. Nowhere on the OER is there a specific requirement to evaluate the organization's effectiveness or the quality of subordinate leaders' development. Though these aspects are sometimes included in the performance evaluation's narrative, they appear only because of the rater's initiative to include them.

The latest version of the OER addresses the need to evaluate a leader's attributes, skills, and actions. Yet, it appears that the Army has no clear way to evaluate these dimensions because no guidance or criteria is provided for evaluating them. No indication is offered about how the information derived will be used, and no feedback is given on how the ratings fit into the overall evaluation. Also, these ratings of attributes, skills, and actions are totally subjective and superficial because they require the rater merely to check a block without comment. This cursory assessment is particularly troubling because the Army does have some effective tools and processes to make such evaluations. Examples include command climate surveys, organizational inspection results, and 360-degree leadership assessment tools.[16] But, as long as the boss's evaluation is the only one that counts, it is doubtful that organizational effectiveness or leader development will ever receive their appropriate share of emphasis, time, or resources.

Evaluation Concept Flaw: Top-Down and One-Dimensional

The current evaluation system is one-dimensional. Its top-down rating approach tends to measure whether an individual kept his boss happy. Was the mission accomplished? No one denies that mission

A 101st Airborne Division soldier briefs his men at Bagram Airfield, Afghanistan, 20 December 2002.

Previous and current senior Army leaders have failed to institute this holistic approach to leadership. Army chiefs of staff have claimed that leadership is key to military success, but they have failed to recognize that unless all of the competencies are solidly developed, the Army leadership structure will collapse.

accomplishment is essential to a military operation, but should mission accomplishment become the sole determinant of a leader's successful performance? An evaluation system that uses mission accomplishment as its sole measure of success—

 Places individual interests (those of the boss and the subordinate) over the organization.

 Provides an incomplete picture of leadership abilities and potential.

 Discourages counseling and organizational skills.

 Compromises integrity by circumventing honest, face-to-face assessments.

 Deters tough, long-term organizational development or team-building processes.

 Fosters a zero-defect mentality.

To avoid these negative consequences, evaluators must expand evaluations to take into account perceptions of subordinates, peers, and the state of the organization, together with the boss's perceptions and with the record of mission accomplishment. Adding these dimensions to the rating process will be cumbersome. Developing the process will take time and experimentation. Implementing this 360-degree feedback will require considerable confidence-building to overcome concerns that jealous peers or disgruntled subordinates will provide distorted feedback. Until multidimensional feedback is institutionalized, the Army will have difficulty refuting the perception that senior leaders are self-serving, short-sighted, out-of-touch, unethical, and averse to risk.[17] Holistic evaluations will address the shortcomings in morale, organizational effectiveness, and leader development that are increasingly evident.

Leader Development

Leadership cannot be learned solely from a book. Although theoretical knowledge is essential and provides the foundation for understanding leadership, experience-based training is the most effective method for acquiring action-based skills.[18] The Army's leadership training is flawed because it overlooks the importance of experience-based training.

Leadership training in Army schoolhouses is currently based overwhelmingly on book-learning. Exceptions are found in specialty training, such as

Ranger School, the Special Forces Qualification Course (SFQC), and escape and evasion courses, in which soldiers learn technical and tactical skills and experience the challenge of leading in difficult circumstances. Imagine trying to explain, even to

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another soldier, what it is like going through Ranger School or SFQC. Without realistic, experience-based training of an escape and evasion course, can we even begin to imagine being a prisoner of war or what it feels like to have the bends from not decompressing properly?

Lectures and case studies cannot substitute for experience. The benefits of experience-based learning are evident in the superior performance, cohesion, and esprit de corps of specialty units, such as the Ranger Regiment, Special Forces, and so on. Even highly realistic and stressful joint experiences of Battle Command Training Program (BCTP) exercises make for effective training.[19] Consider what the quantum leap in effectiveness across the Army would be if experience-based training were applied to attaining organizational and leadership skills.

Today, officers' leadership training, from commissioning source through the Army War College, comes almost exclusively from books. Summer camps, training exercises, and rotational leadership positions, especially at West Point and in ROTC, offer excellent experience-based opportunities, but this training is inadequate in terms of content, intensity, and personal accountability. Experience-based training remains limited once an officer is commissioned. Leadership training in the basic branch schools continues to be almost exclusively classroom-based. The apparent strategy is to teach what is in the field manual, then reinforce that knowledge through case studies of great battle captains. The Army then says, "Go forth. Emulate what you have read, and be successful leaders." Learning leadership is not that easy. Book-learning and case studies provide a good foundation, but the practical, individual experience of actually leading an organization is missing.

A frequent argument for not providing experience-based training opportunities is that real leadership teaching and learning begins in the unit under the watchful eye of a company commander or platoon sergeant. But if the Army does not cultivate or evaluate the full spectrum of leadership skills, what is being passed from one generation of leaders to the next? The fact is that there is little consistency. What is being passed on is a hodge-podge of interpretations, theories, and practices that vary from unit to unit and from leader to leader.

Admittedly, we find many examples in the field where officers get it right—where good on-the-job training and counseling are effectively practiced. Unfortunately, there are many more cases where leaders get it wrong and do a disservice to subordinates. Because there is no consistent Army standard for conducting counseling, leadership development is a hit-or-miss proposition.

Reinforcing Leadership Skills through Counseling

The leader who chooses to ignore the soldier's search for individual growth may reap a bitter fruit of disillusionment, discontent and listlessness. If we, instead, reach out to touch each soldier—to meet needs and assist in working toward the goal of becoming a "whole person" — we will have bridged the essential needs of the individual to find not only the means of coming together into an effective unit, but the means of holding together.

—General (Retired) Edward C. Meyer.[20]

Field Manual 22-100 specifically declares that "subordinate leadership development is one of the most important responsibilities of every Army leader. Developing the leaders who will come after you should be one of your highest priorities."[21] Leaders are directed to provide good counseling by means of dedicated, quality time to listen to and talk with junior leaders. Leaders should help subordinates develop goals, review performance, and plan for the future. However, officers at all levels agree that good counseling is not being performed routinely or adequately. According to Ulmer, "Mentoring and coaching have long been in the Army lexicon, but their routine use is a localized phenomenon, highly dependent on the interests and skills of unit leaders. There is no meaningful institutional motivation for being a good coach, yet that skill is highly prized by subordinates at every level."[22]

Shinseki concurs: "Officers continue to say that they are not being counseled. Commander's coun-

seling is key to leader development and remains one of the most important things we do to develop future leaders of our Army. We all need to do better in making this part of the OER function better so that we reinforce our leader development principles. We must slow things down and reenergize the formal and informal counseling of our officers, especially our junior officers who are feeling particularly pressured to leave the force."[23]

The Army's difficulty in sustaining an effective counseling program is evident in its lack of an overarching process that can be sustained in a rapidly changing, large geographical area. Sustaining a stable professional counseling relationship is especially difficult in a culture where even stable personal relationships are difficult to maintain. Little or no progress toward constructing this counseling program can be expected because we are not offering at any of the routine career courses experience-based training in developing individual interpersonal skills.[24]

The Army does, however, offer training in leadership procedures at junior-level schools, where trainers explain forms and work students through case studies. But where are the hard, uncomfortable, risky encounters in which a student feels what it is like to counsel and be counseled? Where are the consequences or feedback for counseling well or for missing the mark? Where else can this occur while in a controlled environment under the guiding hand of a trained instructor? Despite the rhetoric, the Army allocates little time to counseling skills. Nowhere in the military's professional education system have these skills been integrated into experience-based learning objectives of the overall course. Is it any wonder that junior leaders feel uncomfortable with these competencies? And if they do not feel comfortable in a school situation, how can the unit be the primary leadership classroom and the commander the expert instructor?

The difficulty in changing the evaluation paradigm is that most current leaders made it without the benefit of solid counseling, so they have little incentive to overhaul a system that might have worked for them.[25] Unfortunately, the system worked for current leaders at the expense of unit effectiveness, command climate, and future leader development.

Escape and evasion training in Korea, 1999.

Leadership training in Army schoolhouses is currently based overwhelmingly on book-learning. Exceptions are found in specialty training, such as Ranger School, the Special Forces Qualification Course (SFQC), and escape and evasion courses, in which soldiers learn technical and tactical skills and experience the challenge of leading in difficult circumstances. Imagine trying to explain, even to another soldier, what it is like going through Ranger School or SFQC.

Thus, the current leadership crisis is but one symptom of a larger problem. Combining training in using interpersonal counseling skills with a multidimensional evaluation of all leadership competencies is essential for a return to sound leadership practices.

Surveys of current junior officers indicate that they understand what leadership should look like and the standards expected from them. Time and again, officers who become disenchanted say that their leaders are not walking the talk. More important, leaders are not counseling junior officers in the ways and techniques they need to become successful leaders.[26]

The Army's strength lies in its leaders' dedication to maintaining the highest standards. Leaders do this by adhering to core values, living the leadership attributes, and exhibiting flawless character. The Army has proven itself a mission-oriented institution, and

it has earned world respect through dependable mission accomplishment. Army leadership is the foundation of this great institution, so the Army has expended a tremendous amount of effort and resources to its development. By all accounts, the Army and its sister services are the envy of other government organizations and commercial corporations. However, cracks in the Army's leader development

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program threaten the Army's institutional core—its leadership. Leader development is not adequately supported by experience-based training to reinforce textbook theories. Counseling is little more than a good idea. Almost every officer at every level acknowledges that good counseling is just not happening. Moreover, most officers recognize that the Army is not teaching, developing, or implementing the knowledge and skills necessary to teach officers how to counsel.

Currently, leadership assessment focuses entirely on what officers accomplish, with little consideration for how the mission is to be accomplished. Little regard is given to the unit's effectiveness as an organization or its sustainability over the long term. Such oversight has led junior and midlevel officers to question senior leaders' values, attributes, and character.

Inadequate leader development produces declining command climates, declining retention of junior officers, and increasing hesitancy of midcareer officers to serve in key leadership positions. At what point do the crumbling pillars and cracks in the supporting foundation cause the leadership structure to collapse completely? More important, what can the Army do to rebuild the shaky pillars and restore leadership to its full potential?

Solutions

The Army has a history of successful experience-based, full-spectrum leadership programs. The largest and most promising was the Organizational Effectiveness (OE) program, which flourished from 1975 to 1985. Then, in response to a 1985 Govern-

ment Accounting Office (GAO) report criticizing the Army for not providing leadership-training opportunities to Department of the Army Civilians (DAC), the Army developed a four-level progressive and sequential competency leadership training program.[27] Both programs provide examples of successfully teaching and institutionalizing leadership attributes. Such leadership attributes now appear to be deemphasized by mainstream military leaders. Of note, not one book on Shinseki's suggested reading list addresses organizational or leadership processes.[28] However, lessons learned from such programs could help solve today's leadership crisis.

OE. Following Vietnam, the Army experienced a leadership crisis while transitioning to an all-volunteer force and confronting the daunting challenges associated with the escalation of the Cold War. At that time, leaders' inadequacies manifested themselves in racial strife, drug use, low morale, and poor discipline.[29] The Army's answer to this crisis was Organizational Effectiveness, a business philosophy that emphasized team-building, transformation, organizational learning, and investing in people.

On 1 July 1975, the U.S. Army Organizational Effectiveness Training Center (OETC) opened its doors at Fort Ord, California. By 1980, more than 570 OE officers had been trained, certified, and assigned to units and schoolhouses. Organizational Effectiveness improved the efficiency of units and the effectiveness of leaders as commanders, trainers, and counselors.[30] A 1979-1980 Army study of OE found significant improvement in certain command climate indicators, including morale, supervisory leadership, consideration of subordinates, satisfaction with supervisors, fair treatment from the Army, and job satisfaction.[31] The demand for OE services and products increased exponentially despite their use being totally voluntary.[32]

Between 1980 and 1985, OE found its way into the curriculums of the officer educational system and was becoming institutionalized. The Army was ready to expand OE to encompass larger organizations. Yet, despite its growing success, in 1985 the Army terminated the OE program. The most plausible reason was that personnel and funding resources became convenient bill-payers for building the Joint Readiness Training Center (JRTC), a facility that, interestingly, would develop leader skills that could easily be measured in terms of mission accomplishment.[33]

The process of bottom-up development of organizational goals and objectives, based on the organizational strengths and problem-solving processes at

ROTC cadets attending the National Advanced Leadership Camp, Fort Lewis, Washington, form up for a briefing about rules of engagement for their field training exercise, 26 August 2002.

Today, officers' leadership training, from commissioning source through the Army War College, comes almost exclusively from books. Summer camps, training exercises, and rotational leadership positions, especially at West Point and in ROTC, offer excellent experience-based opportunities, but this training is inadequate in terms of content, intensity, and personal accountability.

the lowest level, was incompatible with the Army's top-down leadership style, which relies on hierarchical structures and centralized control. As OE began to flourish, it conflicted with the traditional military decisionmaking culture.[34] Furthermore, in his doctoral thesis "Tops Down Kick in the Bottoms Up," Christopher Paparone says, "Those who controlled the budget of the Army were never convinced to accept the cost and methods of OE without some centralized control and centralized accounting of the efficiency of the program."[35] The reason behind this nonacceptance was that leadership processes are hard to define and measure. Also, the Army did not do a good job of measuring, documenting, or marketing their successes. As Paparone says, "The very nature of 'touchy-feely' OE flies in the face of snake-eatin', ass-kickin', REAL Army guys."[36]

Organizational Effectiveness ceased to exist, but many OE processes and underlying philosophies are still evident in operational planning and follow-on leadership programs. Although there is controversy

over whether OE was headed in the right direction or had grown too big and was abandoning its basic process approach, there is little doubt that the program had growing acceptance and was showing promise in improving organizational effectiveness. Did disbanding this successful program at the time the Army was at its historic best directly contribute to the subsequent decline in leadership proficiency? We have already noted that the Army cannot answer this question, because it has no formalized process to evaluate OE or leader development.

DAC Training. Currently, the Army has an organization dedicated to leader development. Under the Center for Army Leadership at Fort Leavenworth, the Civilian Leadership Training Division's (CLTD) charter provides all Army civilians a common core leadership-training curriculum from entry-level career interns to top-level executive managers.[37] CLTD's underlying philosophy, similar to OE's, is that OE is an internal collaborative process that empowers the organization to evaluate itself critically,

set its own priorities, and measure progress toward effectiveness. The program is based on building trust and confidence through cohesion and empowerment. More important, it recognizes and builds on the leadership model's nine supporting pillars (values; attributes; character; knowledge; experience-based

> *The apparent strategy is to teach what is in the field manual, then reinforce that knowledge through case studies of great battle captains. The Army then says, "Go forth. Emulate what you have read, and be successful leaders." Learning leadership is not that easy. Book-learning and case studies provide a good foundation, but the practical, individual experience of actually leading an organization is missing.*

training; counseling and mentoring; mission accomplishment; organizational effectiveness; and leader development) to positively influence professional traits, individual development, and organizational effectiveness.

Ironically, this civilian-oriented program began about the time the Army abandoned its OE program. Two circumstances spurred the civilian-oriented program. First, military personnel perceived that civilian counterparts, especially those who supervised military personnel, lacked leadership skills and were incapable of holding key positions. Second, supervisory civilians complained that they were not offered leadership training opportunities as afforded their military counterparts.[38]

Since 1986, CLTD has trained more than 68,000 people ranging from interns to Senior Executive Service (SES) and general officers.[39] Unfortunately, an attempt to quantify the program's value did not begin until 1997 in response to pressure to reprioritize people and dollars. Yet in the last 3 years, at the junior level (up through General Schedule [GS]-11), end-of-course evaluations noted an average 15.23 percent increase in each of 24 leadership dimensions and attributes. At the senior level (GS-12 and above, and lieutenant colonels [LTC] and colonels [COL]), surveys were solicited from students and their supervisors immediately after the course ended and then 6 months later. Evaluations of key leadership skills indicated an increase of 9.5 percent on 13 leadership behavioral indicators as reported by the supervisor, and a 13.5 percent increase as reported by students. When applied as a ratio between increase of value in salaried skills compared to training costs

per participant, the return on investment was 230 percent or 326 percent, depending on whether the supervisors' or the students' value-added perceptions were used in the calculations.[40] More important, after students returned to their home stations and as the training's value to the individual and to the organization became increasingly apparent, organizations began sending more people to attend the course. Eventually, organizations requested the course be exported and taught to their entire organization. This began a new dimension of CLTD known as "consulting."

CLTD has developed and conducted everything from basic team-building command climate workshops and command transition, to complete, long-term organizational improvement programs.[41] This has become a genuine bottom-up, incremental, organizational improvement movement that, like OE, is now at the threshold of having an Armywide effect.

Will CLTD be allowed to mature and flourish? Or, will its resources also be cut and given to another program that simply enhances leaders' technical proficiency rather than other, more fundamental leadership attributes and skills? If leadership development were a piece of equipment and evidence suggested that a change in design was warranted, would not the Army upgrade it?[42] Why then is the Army so reluctant to make such obvious changes in the current leadership training design?

The Way Ahead

Leadership, more than any other skill, is consistently heralded as the Army's load-bearing pillar. When the Army is at its best, leadership is the key ingredient. When it is at its worst, we hear of a leadership crisis. So what makes the difference? Possibly it is leadership training, the effort to hone nonquantifiable leadership skills that do not automatically develop simply because the Army teaches leaders to be technically proficient. Moreover, lack of counseling denies junior officers the opportunity to learn from mistakes and from the experiences of their seniors. Finally, the evaluation process fails to balance all leadership tasks (mission, organization, and leader development), nor does it foster the highest ethical standards. As the Army learned as it repaired itself after the Vietnam war, both individual and unit experience-based leadership training are essential. The Army must maintain balance between mission accomplishment, organizational effectiveness, and leader development.

To develop the next generation of senior leaders, the Army must implement—

☐ Leader development doctrine that emphasizes that leadership is more than just accomplishing the mission.

☐ Progressive, sequential, experience-based leadership OE training.

☐ Multidimensional tools for counseling and evaluating the full spectrum of leadership traits, skills, and actions, and this entire leader evaluation must be part of the promotion, assignment, and school selection process.

☐ Specific evaluation measures that hold leaders accountable for organizational effectiveness and subordinate leader development as a criterion equal to mission accomplishment, of which accountability for effective and routine counseling is most critical.

☐ Safeguards against future efforts to eliminate full-spectrum leadership development and organizational effectiveness as a bill-payer for other programs, especially after correcting current leadership deficiencies.

History shows at least one thing: every time the Army disregards the relational aspect of leadership—the part that causes human interaction to become effective and organizations to operate efficiently—the Army's decline is sure to follow. All pillars in the leadership model must be strong for

> *The difficulty in changing the evaluation paradigm is that most current leaders made it without the benefit of solid counseling, so they have little incentive to overhaul a system that might have worked for them. Unfortunately, the system worked for current leaders at the expense of unit effectiveness, command climate, and future leader development.*

leadership to function, just as any building must have all its load-bearing walls intact to remain standing.

Will the Army ever learn? Ulmer hit the mark: "Strong conclusions about required competencies and behaviors have rarely produced powerful and integrated new policies designed to support the development of the heralded attributes."[43] Solving the leadership crisis will depend on whether Army leaders can understand and institutionalize the leadership model through diligent training and effective, multidimensional evaluation of the full spectrum of leadership competencies. More important, the Army must stick to the experience-based leader-development process. Otherwise, the Army cannot reach its full potential or confidently refute the cyclical claims of a leadership crisis. *MR*

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Precision Launch Rocket System: A Proposal for the Future of the Field Artillery

Major Michael J. Forsyth, U.S. Army

Since the advent of indirect fire on the battlefield, the U.S. Field Artillery (FA) has used cannon-based weapons systems as primary delivery platforms. The past several decades has witnessed an explosion of various technologies that lend themselves to improving field artillery weaponry, so it is now appropriate to examine current capabilities and needs for the future and to suggest how field artillery should change as the Army enters the 21st century.

Where We Stand

The Army's field artillery weapons are not unlike those used during World War II. The M119 105-millimeter (mm) howitzer, the M198 155-mm howitzer, and the M109A6 Paladin 155-mm howitzer have characteristics remarkably similar to their forerunners. They use either semi-fixed or separate loading ammunition and are best suited for area fire. The towed M119's and M198's telescopic sight systems use fixed aiming references that were invented before World War II. The M109A6 Paladin uses state-of-the-art onboard position-locating devices and computers to aim the howitzer at its target, but its ammunition remains almost exclusively area fire. In sum, field artillery systems were built for an organization developed decades earlier.

While U.S. weapons have made modest technological advances since World War II, they are fast becoming antiquated. The Army has witnessed improvements in range, lethality, and accuracy, but this is not enough, given the furious pace of advance by other systems. Army systems, however, weigh more now than did similar World War II systems, but Army cannons are rapidly falling behind the capabilities of foreign-produced guns, such as Britain's AS-90, South Africa's G-5/6, and the North Korean *Koksan* gun. That the Army is falling behind should provide adequate incentive to press for a change that will place it head and shoulders above all other nations' armies in ground-based fire support.

Future Battlefields

In light of technological advances, the Army's FA arsenal is losing relevance at an increasing pace. Today's battlefield is far more lethal than the battlefields of either World War II or the Persian Gulf war because precision munitions are becoming the preeminent weapons of choice. In the Persian Gulf war, less than 9 percent of munitions the U.S. Air Force (USAF) used were precision weapons. Eight years later, in Kosovo, the figure had risen to 29 percent. During the war in Afghanistan, the number of munitions expended soared to an astounding 70 percent.[1] Precision munitions have allowed the USAF to greatly reduce the number of sorties and bombs required to adequately service a target. For example, in World War II, one thousand sorties of B-17s with nine thousand bombs were required to destroy one target. Today, the USAF can fly one B-2 sortie delivering 16 global positioning system (GPS) bombs to 16 targets. The circular-error probable for bombs from the 1940s was 3,300 feet compared to the current 20 feet.[2] The Army's field artillery must use a similar concept to gain this capability with an all-weather, ground-based fire support system.

The battlefield is likely to be far from the United States in a land-locked country. Because of limited USAF lift assets and the heavy weight of Army cannons, field artillery, except towed howitzers, has little strategic mobility. Therefore, it is imperative to develop a lighter weight precision-launch rocket system (PLRS) that lends itself to strategic airmobility.

The military is reducing the long logistical tail traditionally associated with operations. Rather than maintaining large stockpiles of ammunition and other logistic items, the military is reducing stockpiles and replenishing just-in-time service. Cannon-based systems using area fire munitions belie the just-in-time concept. The Army's mode of operation—massed fires from multiple guns—requires enormous stocks of ammunition and a heavy lift capability. Logisticians report that the need to haul artillery ammunition generates approximately 70 percent of a division's logistical requirements.[3] Through its capability to hit a target precisely rather than by throwing multiple volleys of area fire munitions from many guns, PLRS can drastically reduce the amount of munitions a division requires.

Future battlefields will require ground units to cover ever-widening frontages. In World War II, an infantry division covered about 9 kilometers (km) of front; in Korea the distance had expanded to 15 kilometers; and by the time of the Persian Gulf war, the frontage had doubled to 30 kilometers. In the future the Stryker Brigade Combat Team might have to operate across an astonishing 50 kilometers. The Army has no cannon systems that can provide ground fire support in the close fight across a 50-km front and also provide fires for the deep fight.

Modern cannon systems' modest range fans have improved greatly, but rapidly changing battlefields demand additional improvement. Technology is available to design a rocket system that can deliver precision munitions to targets over 50 to 75 kilometers away. Developing such platforms would ensure fire support could cover the zone in the close fight and in a deep fight place the enemy's rear areas under fire as well.

The Army must develop a simple way to link new systems digitally to sensors. A precision system would demand an easy method to link forward observers (FO) or sensors, such as unmanned aerial vehicles (UAV) or radar, to individual weapons to attain responsive fires. For example, a UAV might have an onboard data link to a

firing unit. When the UAV discovers the enemy's location, for example, a second-echelon assembly area, the operator transmits the data digitally to the firing unit. The unit receives the data and automatically sets the target location on the rocket loaded in the launcher. Within seconds of the command to fire, the ordnance, guided by a GPS seeker, is on its way downrange—similar to the USAF's retrofitted dumb bombs. Such a system will enhance responsiveness for the observer-sensor while improving the ability of a commander to reach deep targets.

How the System Might Look

The system I propose is not unlike the multiple-launch rocket system (MLRS), the high-mobility artillery rocket system (HIMARS), or the promising rocket-in-a-box system. The element representing a step forward from these systems is precision guidance of some type. Precision guidance will enable rocket systems to perform close support as well as to conduct deep strikes throughout the depth of the enemy zone of operations.

I recommend lightening the current MLRS to make it air-transportable by reducing the number of pods from 12 to 6 and compressing the chassis. Since HIMARS can already move via air transport, little conversion would be required to ready this system for precision rockets. The rocket-in-a-box seems an excellent fit for the future land component of the Objective Force with its light weight, range, accuracy, and tactical and strategic mobility.[4]

Such platforms would provide fire support to light, medium, or heavy units in a tracked or wheeled configuration. The system should have a variety of munitions from which to choose for multiple situations; smoke; family of scatterable mines; improved conventional munitions; bunker-busting high-explosive munitions; and illumination. Regardless of its munition, it should be guided to its target for precision attack. I suggest GPS munitions that are resistant to electronic warfare. In recent years, the USAF has retrofitted dumb bombs with GPS kits called joint direct attack munitions for precision

guidance to targets. Pilots or ground crews set off the target data on the munitions when in flight or loading.

The field artillery could develop GPS munitions that could work in a similar fashion. The FO or sensor would send a call for fire digitally (possibly on a handheld computer) to either a battalion fire direction center (FDC) or to a pre-designated weapon. The FDC performs tactical fire direction to determine whether to mass multiple systems or to use individual launchers. Once received at the weapon, the crew would review the request and digitally set the target data from the crew compartment to the GPS munition already uploaded in the launch pod. When commanded to fire, they would trigger the launch, which would guide itself to the requested location.

One special munition is called a bunker buster. Some might argue that the Army needs cannons for their power to penetrate hard targets because the Army's 155-mm howitzers do not have that capability. There remains a great need for the capability to penetrate bunkers and other hardened sites, as the war in Afghanistan has demonstrated. However, this does not mean a cannon must perform this task. Several technologies are currently available that would enable a rocket (such as the laser-guided hard-target-penetrating bomb, the GBU-24) to perform this mission. During the Persian Gulf war, the USAF developed a bunker-busting guided bomb that uses condemned 8-inch howitzer tubes. The USAF guides the bomb to its target. Once the bomb penetrates to the prescribed depth, preferably in an enemy complex, the secondary munitions detonate and destroy the bunker. The well-known baby milk factory incident in Iraq is an example of the use of such munitions. Therefore, it should be possible to develop a similar precision munition for rocket artillery.

Potential Benefits of PLRS

A host of potential benefits, including enhanced strategic mobility, can be associated with the development of a new rocket-based system. The greatest drawback to maintaining a cannon-centric field artillery is that the howitzers' weight reduces air

transportability. The reduced weight of a rocket system would enable the field artillery to move to distant theaters by air to add all-weather firepower to the combined arms team. Other potential benefits include the following:

◻ The ability to attack distant targets with precision. The joint targeting team continues to prefer precision-strike weapons systems as the most effective means of attacking enemy targets. A more accurate FA platform with the power of rocket munitions would add an excellent capability and new choice to the arsenal of the joint targeting team. A precision rocket system can provide close support as well as deep fires for all-around fire support.

◻ The ability to reduce the long logistical tail. The ability to attack with a precision FA rocket system would greatly reduce the transportation requirements for munitions. This would also support just-in-time logistics by reducing the need for large stockpiles of munitions. Overall, precision rocket munitions would offer cost savings in transportation and numbers of rounds required.

◻ The capability to provide force protection. The MLRS and the Army's current Paladin are highly mobile, thus lessening the threat from enemy counterfire. Nevertheless, these systems must sometimes fire multiple volleys for one fire mission from the same firing position to achieve the prescribed effects on the target. A precision system can potentially reduce the number of volleys fired to achieve required effects because it can place the round at a more precise location. Weapon systems that fire GPS munitions are nearly impossible to detect with weapon-locating radar because the munitions do not follow a ballistic trajectory. Not being able to detect the weapon systems' location lowers the risk from counterfire because the firing platform does not have to remain in position as long, thus saving many lives and much costly equipment.

◻ The ability to conduct precision field artillery attacks. Precision attack reduces the number of delivery platforms and the personnel required to man them. Currently, cannon battalions have 18 guns and 6- to 13-man

crews in their TOE. This provides the unit the ability to mass all of the guns in area fire missions. Often, the guns must fire multiple volleys to achieve the desired effects. A precision attack system would not only reduce the number of volleys, it would also reduce the number of platforms needed to attack a target. PLRS is not an area-fire concept but a precision-weapon concept. Therefore, the idea is to make the field artillery a one-round, one-kill combat arm.

Implications

Has the field artillery lost its relevance as it moves into the 21st century? While I would answer this question with an emphatic "No," I must agree that the branch is slipping behind at a steady pace. The most important thing the field artillery can do to maintain its place in combined arms operations is to adapt a weapons system to the changes in future military thinking and technology. Trends suggest that there is a need for a strategically mobile, precision-capable weapons system that requires a greatly reduced logistical tail.

Now is the time to shift from cannon-centric systems to a precision-launch rocket system with a suite of munitions available for the full range of combat operations. Munitions should have a reliable, cost-effective guidance package such as an electronic-warfare-resistant GPS system. Precision rockets can maintain and enhance current capabilities; provide air-transportable fire support; offer the joint targeting team an additional weapon for precision attack; and greatly reduce the logistical tail of artillery units. Developing such a system will take time, but the military has the technological means to meet such a challenge. Fielding a new precision-rocket platform will keep the field artillery on the forefront of combined arms operations. **MR**

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"Come as You Are" Warfare: The Bataan Example

Major James Albrecht, U.S. Air Force; Major Joseph Edwards, U.S. Army; and Major Terrence Popravak, U.S. Air Force

*We're the Battling
   Bastards of Bataan,
No mama, no papa,
   no Uncle Sam,
No aunts, no uncles,
   no cousins, no nieces,
No pills, no planes,
   no artillery pieces,
And nobody gives
   a damn!*

—Frank Hewlett, 1942[1]

In retrospective examination of campaigns and military history, we often look at defeats superficially. We are quick to point out that events occurred because one or more principles of war were neglected or that, in hindsight, it was perhaps inevitable because of inadequate planning or unpreparedness. Yet, we seldom look critically at how underlying reasons for defeat might apply to the present. The Bataan Campaign is a case in point. Although the Campaign was a painful defeat for U.S. forces, lessons learned from the period immediately preceding the Campaign, in the areas of command and control (C2) and logistics, remain critical to 21st-century joint and multinational operations.

For most of the period between World Wars I and II, military planners considered the Philippine Islands indefensible against a determined Japanese attack.[2] Plans for defense of the Philippine Islands were intended to deny the Japanese the use of Manila Bay via limited resistance on Corregidor Island and the adjacent Bataan Peninsula.[3] Initial planning for the Pacific Theater was for a unilateral U.S. campaign against Japan, known as War Plan Orange. (For purposes of secrecy, Japan was designated as country Orange for planning.) In the summer of 1941, President Franklin D. Roosevelt's national strategy evolved toward a Europe-first prosecution of the war formalized by the Arcadia Conference in Decem-ber 1941. The RAINBOW plans (so-called because they melded the previous color plans into an overarching strategy) codified this strategy. However, the defense of the Philippines remained essentially unchanged. Defense plans called for a limited action designed to deny the Japanese the use of Manila Bay for approximately 6 months, with an unstated hope that relief could be provided by the end of that period.[4]

In the summer and fall of 1941, the U.S. Army began a shift in emphasis and began to make plans and efforts for a greater defensive role by U.S. forces in the Philippine Islands, a role that could conceivably mount a successful defense. The Joint Army-Navy Board, predecessor of the Joint Chiefs of Staff, approved this change, although the board did not necessarily change other aspects of the plan to support this new development.[5]

In addition to planning in Washington, a parallel effort was undertaken in the Philippines. As early as 1934, Headquarters, Philippine Department in Manila (HPD), developed an internal defense plan under the Plan Orange scenario. The third plan in this series, revised in 1941, was designated HPD War Plan Orange-3 (WPO-3) and only dealt with defense of the Philippines.[6] The plan called for a three-phase defense of the main island of Luzon. The first phase would be a defense of potential landing beaches, particularly at Lingayen. If the first phase failed to stop an invader, a second phase would begin. The second phase consisted of a timed withdrawal along five defensive lines south to the Bataan Peninsula. Phase three consisted of defensive operations on Bataan and several harbor islands, including Corregidor.[7] Also; WPO-3 called for integrating Philippine forces into the island's defense.[8]

MacArthur Returns

On 26 July 1941, amid rising tensions in the Pacific following Japa-nese occupation of Indochina, U.S. Army General Douglas MacArthur returned to active duty and assumed command of the newly created United States Army Forces in the Far East (USAFFE), and Roosevelt federalized the Philippine Commonwealth forces under MacArthur's command.[9] MacArthur, who had been in the Philippines as military adviser of the commonwealth for some years before being named the USAFFE Commander, regarded the overall tone of HPD WPO-3 as being defeatist in nature. MacArthur considered the defense of the beaches to be critical in stopping a Japanese invasion of Luzon. He emphasized his intent that there would be no withdrawal from the beaches.[10]

A large part of MacArthur's strategy to defend Luzon depended on the ability of commonwealth forces to carry on the fight, despite shortages of equipment and materiel. He envisioned a 10-division-strong Philippine Army (PA) force in addition to the U.S. Army's Philippine Division (unnumbered) composed of U.S. and Philippine Scout (PS) troops. He planned also for a period of training and equipping lasting until April 1942. This timeframe would be used to bolster beach fortifications and supply depots. However, the strike on Pearl Harbor demonstrated that this time would not be available. As a result, the embryonic Philippine Army was not fully trained and equipped when called on to take its place alongside U.S. and PS defenders.[11]

On 8 December 1941, at 0330 in the Philippines, the Associated Press notified USAFFE that Pearl Harbor had been attacked and that America was at war with Japan.[12] Some 9 hours later, Japanese bombers attacked Clark Field on Luzon destroying half of the Far East Air Force's bombers and about 20 other aircraft on the ground, effectively crippling their strike capability.[13] Following the air strikes, U.S. Asiatic Fleet Commander Admiral Thomas Hart with-

drew most major surface ships from the vicinity of the Philippine Islands, leaving behind some minor combatants and support vessels.[14] Japan's main attack on Luzon began early on 22 December 1941 at Lingayen in northern Luzon. American and Philippine forces were unable to hold the beach and by 23 December, the Japanese had advanced 10 miles. On the night of 23 December, MacArthur ordered the withdrawal of all American and Philippine forces onto the Bataan Peninsula.[15] U.S. Army Chief of Staff, USAFFE, General Richard K. Sutherland informed the staff the next morning.[16]

Withdrawal to Bataan was haphazard at best. Stores of food, ammunition, and fuel recently pre-positioned forward for the defense of the beaches were abandoned or destroyed in place. Provisions for forces moving into Bataan were incomplete, although ample stores were present on Luzon. Transportation resources were also lacking, so in many cases, only personally carried items were brought with the retreating forces. Almost immediately the forces on Bataan were placed on half rations and by mid-March were subsisting on quarter rations of only 1,000 calories per day.[17]

Troops Dig In

American and Philippine troops dug into defensive positions on the slopes to the east and west of Mount Natib along the Abucay and Mauban lines in preparation for the inevitable Japanese attack. The heights of Mount Natib were rugged and deemed impassable and so were not occupied by friendly forces. On 9 January 1942, Japanese forces began their offensive to take Bataan. American and Philippine forces held until 22 January when the Japanese penetrated the center of the defensive lines by moving up the supposedly impassable Mount Natib.[18] By 26 January, American and Philippine troops pulled back and established a single new defensive line (the Bagac-Orion Line) north of Mount Bataan across the width of the peninsula. Forces were able to repulse a series of early Japanese attacks and some attempted amphibious landings until early March. The Japanese took serious losses in these attacks and withdrew to regroup and reconstitute. On 3 April, reinforced Japanese

forces began a final assault on the malnourished defenders. The Japanese breached friendly lines in about 36 hours, forcing the eventual surrender of the Bataan forces on 9 April 1942.[19]

The original WPO-3 had envisioned the defense of the Bataan Peninsula to last up to 6 months before a relief mission could be mounted.[20] American and Philippine forces had held for 4 months—since the beginning of the war—but no relief mission was underway or yet planned. Few supplies made it through the Japanese blockade, and friendly forces, suffering from a variety of diseases, were seriously undernourished from subsisting on ever-decreasing, unbalanced rations. On 6 May, U.S. Army Lieutenant General Jonathan Wainwright surrendered Corregidor and all other American and Philippine forces in the Philippines, ending America's rule until MacArthur returned 2-1/2 years later.[21]

Command and control was of critical importance to Philippine defense, but the C2 arrangement in the Philippines was the least effective imaginable. Although ineffective for the campaign to retain the Philippines, the C2 structure did not violate any of the precepts for a C2 organization. Its ineffectiveness can be traced to a failure to effectively execute the principles that enable C2, a condition often symptomatic of joint and multinational operations today.

Under MacArthur's control were three sector forces consisting of combined American and Philippine forces. Two of these were on the island of Luzon (North and South), and the other was on Mindanao with responsibility for all the other Philippine Islands. In addition, MacArthur had U.S. Army air assets consolidated under Major General Lewis H. Brereton. Colonel Charles Drake was Quartermaster General. Hart operated in support of USAFFE. Ironically, this organization changed several times over the next 75 days. It changed when North and South Luzon forces were consolidated in the Bataan Peninsula, again when the east and west sectors of Bataan were established as I and II Philippine Corps, again when MacArthur evacuated to Australia, and even after that.[22] While this evolving command structure

showed some adaptability to changes in the situation, the leadership shuffle itself was a source of confusion.

Even before Japan's invasion of the Philippines, the stage was set for confusion. MacArthur, pushing for a more aggressive defense of Luzon, directed that the beaches were to be held at all costs. On 21 November 1941, the War Department approved his changes to the new Philippine defense plan.[23] MacArthur envisioned that under the new plan defense preparations would be complete by April 1942. He directed that supplies be stockpiled forward to support the beaches. Stockpiles on Corregidor were not to be wholly depleted, but supplies intended for the Bataan Peninsula under WPO-3 were moved forward to advance depots and other key defensive positions.

MacArthur Caught Short

The attack on Pearl Harbor caught MacArthur's preparations short, and he and his staff had to consider the feasibility of a beach defense. It was not until 23 December, however, after the beaches at Lingayen were lost, that MacArthur decided to implement WPO-3. No one had anticipated the potential for withdrawal to the Bataan Peninsula since MacArthur's intent to defend at the beaches had been made abundantly clear. This caught Drake off-guard, with the result that many critical supplies needed to defend Bataan and Corregidor were not in position.[24]

While troops could move quickly into Bataan, their supplies could not. MacArthur's desire to defend at the beaches served as an effective intent statement for Drake and meant that food, fuel, ammunition, and medicine, which should have been pre-positioned in Bataan and Corregidor, were not. Instead, these vital supplies were either in supply dumps to support the beach defense or disbursed to units deployed about the island.[25]

Commander's intent should be written to allow subordinate commanders the latitude to use their initiative to react to a changing situation. Although MacArthur had taken issue with Washington that the Philippine defense plan was defeatist in nature and too restrictive, his own instructions were, in fact, highly restrictive and did not allow his staff

and subordinate commanders the leeway to act when the situation became untenable.[26]

Unity of effort was also critical to command and control in the Philippine defense. Under the Naval portion of RAINBOW-5, Hart's mission was to support MacArthur's defense of the Philippines as long as that defense continued.[27] Hart's small fleet consisted of 3 cruisers, 13 old destroyers, 29 submarines, 32 patrol aircraft, and some smaller surface craft. After Pearl Harbor, he focused on his small fleet's survival as a combat force in the Far East. Under RAINBOW-5, his mission gave him the latitude to move to Dutch or British ports at his discretion to protect the fleet.[28] In fact, the Navy's stated purpose under RAINBOW-5 emphasized operations to draw enemy strength away from the Malay barrier. How and when a westward advance of the Pacific Fleet would reach the Philippines was not indicated, nor was there any apparent mention of relief of forces in the Philippines.[29] Shortly after receiving reports of the destruction of Pearl Harbor, Hart moved most of his surface force from the Philippine Islands, leaving only his submarine force and some coastal patrol craft behind under the command of Rear Admiral Francis W. Rockwell of the 16th Naval District. Hart's intent was to continue to provide MacArthur support with these assets, while preserving his more vulnerable surface ships.

The Japanese were soon able to interdict the sea lines of communications to Manila Bay and almost completely cut off any resupply operations to Bataan and Corregidor. MacArthur's efforts to persuade Hart to break the blockade were to no avail. Finally, on 9 January 1942, MacArthur wired General George Marshall at the War Department, stating, "Hart maintains defeatist attitude re[garding] Philippines. . . . I urge steps be taken to obtain more aggressive handling of naval forces in this area."[30] Whether Hart could actually have broken through Japanese-controlled seas, which by then extended south of the Dutch East Indies, is unlikely given the age, number, and capabilities of his modest forces. The effect on unity of effort was obvious: MacArthur's sole focus was the Philippines' defense; Hart was taking a broader view consistent with orders he was receiving from the Navy Department.[31] On 30 January 1942, in response to MacArthur's stinging comments, however, the War Department placed MacArthur in charge of all forces in the Philippines, including naval assets.[32]

Such a striking difference in aims is unlikely between U.S. forces today, but the potential for working at cross-purposes is high for multinational forces where supporting and supported commanders might be operating under different sets of priorities established by their national governments. As recently as 1999 in Kosovo, we have seen how multinational forces do not always work with true unity of effort. When directed to capture Pristina Airport, the British commander refused the direction of the U.S. commander in charge of the operation.

In the Philippines, communication was also a major inhibitor to effective command and control. The Filipino people are multilingual. Troops within hastily activated PA divisions spoke a variety of languages and dialects. For example, in the 11th Infantry Regiment, personnel spoke 11 dialects—five within one company alone. Tagalog-speaking officers from central Luzon could not communicate with troops speaking the Ilocano (mountain) dialect.

To facilitate command and control of PA divisions, MacArthur directed officers from U.S. forces to serve as trainers and advisers in PA units. The U.S. officers often had to rely on native translators where available.[33] Orders to the units would come down in English, but they still needed to be translated into Spanish, Tagalog, or any of the other dialects used by commonwealth troops. This communication challenge led to delay; inaccurate relay of commands and instructions; and outright confusion and frustration. Even today, skilled multilingual officers and specialists within the U.S military are scarce, and it must often rely on other forces that can speak and read English.

Command and control at the operational level leading up and into the Bataan Campaign was horrendous. Orders were often miscommunicated because of language problems. Orders in the U.S. chain of command, which contravened MacArthur's dictum to defend the beaches, had to go all the way to him for resolution because his intent was not questioned. Only when MacArthur reinstated WPO-3 did the forces have a common reference point, but by then the stage was set for the logistics nightmare on the Bataan Peninsula.

Logistics played a key role in the final outcome of the Bataan Campaign and the eventual surrender of American and Philippine forces. According to joint doctrine, modern logistics operations are predicated on seven principles: simplicity, flexibility, economy, survivability, sustainability, responsiveness, and adequacy. The Bataan Campaign was lost because these principles were violated wholesale. MacArthur's strategic decision to defend at the beaches did not allow his logisticians leeway to properly plan for distributing critical supplies. Many supplies and much equipment necessary to support the defense of Bataan were lost at forward supply depots, military installations, or the Manila area. Some stockpiles were lost to the Japanese, but withdrawing forces destroyed the majority.[34] Without sufficient supplies—especially food and equipment—the Bataan defenders were doomed.

Positioning of Supplies

Positioning of supplies did not allow for flexibility and survivability in the face of invading Japanese forces. MacArthur's plan for the aggressive defense of Luzon led to the dispersion of assets from quartermaster depots in the Manila area to four advance depots (three on Luzon, one on Cebu) in direct support of forces. Each Luzon depot was to stock 15 days of Class I (subsistence) and Class II (clothing and equipment) supplies.[35] No plans were in place to retrieve forward supplies because MacArthur's intent was clearly to defend forward. WPO-3 was "discarded as far as Bataan was concerned."[36] WPO-3 had called for stocking Bataan with 180 days of supplies for a garrison of 43,000 troops, but the quartermaster's instructions were that "under no circumstance would any defense supplies be placed on Bataan."[37]

When MacArthur at last imple-

mented WPO-3, the majority of the forward stores were lost. The Tarlac Advance Depot quartermaster, supporting the North Luzon force, broke his supplies up into division-size lots before withdrawing in the hopes that retreating units could grab them on the run. What could not be carried was destroyed in place. Quartermaster operations at existing military bases were also caught up in the chaos. At Fort Stotsenburg, 250,000 gallons of gasoline were destroyed because there was no time or transport to remove it. While sitting in the rail yards at San Fernando, Guagua, and Lubao, 70 rail cars of supplies, including 6 artillery pieces and 10 cars of 155-millimeter artillery ammunition were lost to enemy air attack.[38]

A rapidly deteriorating transportation infrastructure complicated efforts to move supplies to Bataan. Drake was responsible for organizing the movement of additional supplies to Bataan once WPO-3 went into effect. He estimated that in uninterrupted and good conditions, it would take 14 days of 24-hour operations to relocate supplies from Manila to Bataan.[39] By this time, however, the transportation infrastructure was in shambles.

The Army depended on the Manila Railroad for moving the bulk of supplies, but by 15 December, enemy air attacks had degraded rail operations. By Christmas, not one locomotive was in operation.[40]

Motor transport resources were limited and under constant threat of air attack. About 1,000 vehicles had been appropriated from Manila when the war began. Many of these were commandeered by American and Philippine officers desperate to acquire transport for their units.[41] By the time the Motor Transport Service established operations in Bataan on 1 January 1942, only 18 vehicles remained.[42]

Transportation of supplies to Bataan and Corregidor was accomplished ad hoc by water and by highway from Manila.[43] The primary quartermaster effort was made by water using all available launches, tugs, and barges. There was difficulty keeping sufficient stevedores on the job based on the ever-present air threat, but the Luzon Stevedoring Company, with civilian volunteers, was enlisted to help keep supplies

moving.[44] In the end, this effort was inadequate to support the more than 100,000 troops, refugees, and laborers in Bataan.

Simplicity was not possible in the scramble to supply Bataan. On 6 January 1942, half-rationing was implemented. Each person received half of the nearly 4,000 calories required to sustain an active person. By mid-February, the amount had been reduced to only 1,000 calories per person per day.[45] Economy was perhaps the only principle of logistics not violated.

Resupply operations to Bataan and Corregidor were largely unsuccessful. No large resupply force dared attempt to break the Japanese blockade of the island. Some supplies made it to Cebu where they were loaded onto blockade-runners (fishing ships and small, fast coastal craft) for a dash up to Luzon and into Manila Bay. This tactic was rarely successful. Some supplies were smuggled in via submarine, but the quantities were too small to make a difference. Only about another 4 days of supplies for the force of 100,000 ever made it through.[46] The lack of sufficient maritime assets to force the blockade meant that resupply operations into Bataan and Corregidor were neither responsive nor sustainable.

Innovation, an unofficial principle of logistics, was applied successfully by Bataan quartermasters. The peninsula had few natural resources, but it was not destitute. Local slaughtering operations were set up to provide meat from indigenous animals. Water buffalo, horses, mules, cattle, and pigs provided almost 3 million pounds of meat to the defenders. In addition, a fishing center yielded up to 12,000 pounds of fish daily until the Japanese managed to intimidate the local fishermen into quitting. Fresh water was available, and up to 400 pounds of salt per day (for preservation) was generated by boiling seawater. Great efforts were made to gather palay from the countryside, and some rice mills were established to process it, but the total effort yielded only another 150,000 pounds of processed rice.[47] By February, however, almost all avenues were exhausted, and the defenders had to rely only on what they had managed to stockpile.

Thorough Lack of Planning

The decision to revert to WPO-3 reflected a thorough lack of planning, preparation, and communication with regard to movement of supplies. Indeed, USAFFE failed to account for any possibility other than victory at the beaches; no other options were considered. When the defense crumbled, the logistics operation crumbled with it. Only innovative, resourceful logistics support enabled the defenders to hold out until April on Bataan and May on Corregidor.

The American and Philippine forces' ability to hold out against superior Japanese forces for nearly 5 months, from the main Japanese landings in December 1941 until Wainwright's surrender in May, is a testament to the courage and tenacity of these fine soldiers. By a quirk of strategic policy and unfortunate timing, they became isolated, without supplies, equipment, or training necessary to perform their missions. Despite great personal hardship, their determination to resist kept them going.

Probably U.S. forces today will never face conditions as extreme as the conditions that the soldiers on Bataan faced in April 1942. But military leaders at all levels should appreciate lessons learned from this campaign.

Developing a campaign plan must account for all eventualities; one cannot assume mission success, which comes from planning and understanding capabilities and limitations as well as the enemy's. Commanders must communicate their intent to subordinates in such a way as to allow them some degree of autonomy, including developing fallback options. Open communications must extend vertically and horizontally within military forces. Logistics planning must be tied directly to operational planning. Branch and sequel options accounted for in the operational planning process must be tested in the logistics planning process to determine if they are supportable.

In the future, we will likely operate more closely with various nations and within multinational coalitions. We cannot expect all forces to bring the same level of experience and training to the fight. We must consider carefully how best to leverage their unique capabilities for a

common objective; how we can enhance communication; and what are appropriate missions for them. Many of our allies speak English as a second language, yet few U.S. personnel are trained in other languages. Can we efficiently and effectively integrate other nations' forces placed under our command? What will be the common mechanism? In many cases, the Philippine forces in Bataan could not even communicate with one another. How would we, as the foremost military in the world, deal with this situation? It is a daunting challenge.

The surrender of forces in the Philippines was the largest ever surrender of U.S. forces to a foreign power. The 76,000 American and Philippine troops who surrendered in Bataan were sick from malaria and other jungle diseases and wasted from malnutrition. They were marched from their point of surrender 65 miles to the Japanese prisoner camp at Camp O'Donnell. Only 54,000 survived. Many later died of disease, malnutrition, or torture. Many died aboard the "hellships" that took many of the American survivors to Japan.[48]

We have heard many times the refrain, "No more Task Force Smiths," in reference to the defeat of the unprepared U.S. forces at the beginning of the Korean conflict. Maybe we should draw from an earlier, more brutal lesson and cry out, "No more Bataans, *ever!*" **MR**

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Algerian Defense Minister General Khalid Nezzar: Memoirs

Lieutenant Commander Youssef H. Aboul-Enein, U.S. Navy

General Khalid Nezzar is a controversial figure in Algerian politics. To some he saved the nation from sliding into the abyss of religious radical governance. He is credited with starting the Algerian Civil War after he nullified the 1991 elections in which the Islamic Salvation Front *(Front Islamique de Salut [FIS])* was posed to win. Although Nezzar's human rights record is highly controversial, this does not discount his intimate knowledge of and involvement with the military aspects of bringing independence to Algeria.

While visiting Algiers in 2003, I picked up one of Nezzar's memoirs. The book, *Battle Stories,* published in Arabic, offers Nezzar's recollections of the Algerian War of Independence that lasted from 1954 to 1962. The long, grueling war caused the mutiny of the French Foreign Legion units whose mission was to retain Algeria as a French colony.

Nezzar gives readers insight into the organization and tactical thought of Algerian guerrilla and conventional warfare. This book and Nezzar's 1999 memoir are important works of military history available to Arab readers. Nezzar's books are also accessible in French.

The National Liberation Front

Today, the warring factions in Algeria are the ruling National Liberation Front *(Front de Liberation Nationale [FLN]),* the Armed Islamic Group *(Groupements Islamique Armé [GIA]),* and the Salafist Group for Preaching and Combat *(Groupe Salafiste pour la Predication et le Combat [GSPC]),* which is closely linked to al-Qaeda. These militant groups consist of Algerians reared on the stories and tactics of the Algerian War for Independence.

Nezzar's memoirs give us an understanding of the terrain, tactics, and evolution of combat capabilities of guerrilla movements in Algeria. The book offers lessons in how French Armed Forces dealt with terror tactics and guerrilla warfare in the past and how these lessons might be applicable today. For example, Osama bin-Laden studied terrorist groups and successful insurgency movements, particularly those of Arab liberation, and he counts the GIA as part of his declared World Muslim Front.

Nezzar has recently been the subject of a 2002 court case in which he was charged with torture and inhumane treatment of his enemies. Former Algerian army officer Habib Souaidia's book, *The Dirty War (La Sale Guerre),* published in French, accuses Nezzar of torture, extrajudicial killings, and for prolonging the state of emergency. According to the "Executive Summary for Algeria Under Politics," in *Jane's Sentinel Security Assessment—North Africa* (on-line at <www4.Janes.com>), ultimate power in Algeria is thought to be in the hands of five generals, one of whom is Nezzar. Nezzar's memoirs might offer insight into his motivations for not wanting to see Algeria lapse into religious radicalism.

Early FLN members were a cell of disgruntled officers of the French Auxillary Forces and Foreign Legion. Before beginning the independence movement in 1954 this cell focused on recruiting and studying military topics useful to insurgency movements, including demolitions training and mine and countermine warfare. In essence, the French Armed Forces helped train early FLN organizers.

In many ways, Nezzar's account is reminiscent of the story of U.S. Special Forces Sergeant Ali Mohammed, who in the early 1990s provided al-Qaeda with valuable training manuals that formed the basis of their jihad encyclopedia and operations manuals. Amazingly, Mohammed traveled to Afghanistan to train Islamic militants while on active duty in the U.S. military and without the knowledge of his chain of command. He also used skills learned in the U.S. Army to "case" U.S. embassies in Dar-el-Salam and Nairobi.

Nezzar's memoirs also examine the FLN's early organization and strategic goals. Nezzar writes that a committee formed the National Revolutionary Council *(Conseil National de la Revolution Algerienne [CNRA]),* which included military men who had fought for France in Indochina and during World War II. The CNRA was FLN's political organ. In 1959, the CNRA formed a military committee in an effort to merge political and military aspects of the guerrilla war and attacks within Algerian cities. Nezzar outlined the following strategies for the military committee:

⬜ To destroy electric fences the French had erected to keep FLN units from infiltrating the Algerian border.

⬜ To recruit personnel to the FLN.

⬜ To conduct operations and military strikes to disrupt the economy.

⬜ To expand the conflict out of the cities to include the Sahara regions where regular French units could be divided and harassed.

⬜ To conduct military operations and guerrilla strikes on French soil.

⬜ To develop leadership within the movement.

Nezzar mentions the importance of logistics bases in Tunis, Libya, and Morocco. He also mentions the importance of Egyptian President Gamal Abdul-Nasser, who provided funds, training, and most important, the Voice of the Arabs radio station that provided Arab nationalist solidarity propaganda. The nations also sponsored meetings for FLN leaders to discuss strategy. The Revolutionary Command Council met every three months to reevaluate its course and to change the direction of hostilities alternating between guerrilla and conventional tactics. The chiefs of every organized unit of the ALN attended meetings.

Of the nations that supported the FLN, Nezzar credits Tunis with providing safe havens for refugees. The movement of those refugees offered the perfect mechanism for transporting supplies and fighters across borders. Nezzar also reveals that Tunisia's restriction against allowing pursuing French army units to cross the Tunisian border gave the FLN a chance to use the border to target

French Army units, then withdraw to hit them again. This allowed them to know the exact locations where units would stop to try to direct and concentrate fire.

A Maginot Solution?

In response to terror tactics in Algeria's major cities, which included assassinations of French police, civil servants, and military personnel, the French erected electronic fences across Algeria's borders and around towns and villages. Nezzar describes how the electronic fence was interspersed with guard posts, mines, and a rapid heliborne response force. French tanks, artillery batteries, and mobile radar units reinforced the fence. Named the Morice Line after French Defense Minister André Morice, the fence was enhanced with motion-detecting tripwires.

Nezzar details the challenges of penetrating the Morice Line and the ALF guerrilla tactics of attacking one area of the line as a diversion while amassing forces to overrun a smaller garrison or watchtower elsewhere. Nezzar writes that careful reconnaissance by Algerians sympathetic to the independence movement carefully watched the deployment of French fighter-bombers and helicopters in major coastal airports. The sympathizers gave the FLF important information with which to assess whether diversions had succeeded.

A few FLN fighters were veterans of Diem Bien Phu and understood that to force the French to withdraw, the FLN had to inflict massive losses. Nezzar calculated that French casualties reached 350,000 with 39,000 dead, which proved to be the limit to France's will to fight.

Nezzar discusses other key factors, such as the ALN's methods of gathering information. The movement monitored newspapers, paying particular attention to French casualty lists. The ALN acquired skills to conduct reconnaissance from the sea, and it developed specialized units to penetrate the Morice Line and to clear mines. Diversionary attacks were made to allow sappers and wirecutters time to penetrate electrified fences. The ALN also took great care in selecting key terrain, not just for ambush but to monitor French military convoys, command post activity, and roads. Ever mindful of helicopters, the ALN made great efforts to track all French military air assets based in Algeria.

The French wanted to win battles with overwhelming force and would meet 60 FLN guerrillas with the same pattern of tanks; command and control helicopters; and trucks carrying infantry as they would have if they were confronting a larger force. The FLN discovered the pattern of French attacks and using the terrain and the time of their own choosing, summoned overwhelming force. Their objective was to inflict casualties then withdraw to fight in another location. Or, they would lure French forces to the Tunisian border, knowing the French would stop at certain locations where they would be met with mortar fire. These tactics were the same as those Vietnamese General Giap used against French forces in Indochina and later against U.S. forces in Vietnam.

FLN conventional units consisted of infantry, 82-millimeter (mm) mortar, and 57-mm cannons. The FLN took care to assign French-trained veterans to volunteers new to combat. By the end of the war in 1962, the FLN had armed and equipped 25 regiments.

Analysis and Criticism

Nezzar's description of actual battles focuses on the emotional aspects of the fight and lacks any real tactical detail. What I gleaned from the two chapters in which FLN units engaged French forces is that before hostilities began the Algerians had planned both the attack and the avenues of retreat.

The book lacks a topographical map, which would have helped readers understand the terrain and unit locations. I also criticize Nezzar's romanticization of the conflict. The Algerian war of independence was ruthless. The cafe wars alone killed 5,000 civilians. French civilian vigilante units, called rat hunters (*ratonnades*), targeted Arabs and alienated the local population. Also, the book does not mention the French policy of *regroupement*, which resettled two million Algerians into squalid camps. Nevertheless, this book is important and should be of interest to counterterrorism and foreign area officers.

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THE EVOLUTION OF SPECIAL FORCES IN COUNTER-TERRORISM: The British and American Experiences, J. Paul de B. Taillon, Praeger, Westport, CT, 2001, 190 pages, $62.50.

The title is the only mistake in this book. Special Forces did not evolve *in* counterterrorism; it evolved *into* counterterrorism. While counterterrorism might be the topic currently in vogue, the other missions of Special Forces remain. Overall, this brief book does an excellent job showing how Special Forces evolved in Britain and the United States.

Britain, with its perpetual Northern Ireland Training Area and colonial experience, has the advantage of an institutional memory and a military of veterans with practical experience. America's experience has been more eclectic. J. Paul de B. Taillon points out that America has also been prone to fashionable attitudes toward special operations. Contrasting the two experiences, the author finds that the British stress the human element of Special Forces, while the United States stresses technology. Both are necessary; however, Taillon finds the reliance on technology to be self-defeating.

Along with the history of the respective Special Forces establishments, Taillon identifies principles of unconventional warfare, which will be useful to scholars in the field. Of relevance to the title, Taillon argues the need for international cooperation against terrorism. Far from writing antiterrorist platitudes, he argues specific areas in which nations can share technology, information, and expertise.

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THE UNION THAT SHAPED THE CONFEDERACY: Robert Toombs and Alexander H. Stephens, William C. Davis, University Press of Kansas, Lawrence, 2001, 284 pages, $29.95.

William C. Davis's latest book, *The Union that Shaped the Confederacy: Robert Toombs and Alexander Stephens,* is an unusual biography of a friendship between two men who were influential in antebellum Georgia politics and in the founding of the Confederacy. Although they were opposites in personality and physical size, Toombs and Stephens were close friends and political allies.

The story is interesting in that Toombs and Stephens were embraced as moderates to free the nascent nation from fire-eater radicals such as Robert Rhett and William Yancey. Confederate President Jefferson Davis marginalized Toombs and Stephens, and ironically, they joined the fire-eaters in their opposition to Davis's policies. Toombs seemed to personally resent Davis for beating him out of the office of president while Stephens vehemently opposed Davis's antilibertarian policies, especially the suspension of the writ of habeas corpus.

Davis has done his usual thorough job of investigating the subject of the interplay between forces of political moderation and radicalism, pride, and ambition in the mid-1800s. The story that results is well worth reading.

LTC D. Jon White, *USA, Smithfield, Virginia*

MAO'S CHINA AND THE COLD WAR, Chen Jian, University of North Carolina Press, Chapel Hill, 2001, 400 pages, $49.95.

In *Mao's China and the Cold War*, Chen Jian interprets the course of Sino-American relations between 1945 and 1972 through nine cases, using newly accessible Chinese archival sources. He also provides a useful bibliographical essay outlining the major works on these cases. Because many archives are still closed, these studies are not definitive, but they begin to illuminate the reasons for Chinese perceptions and behavior.

Originally published as separate journal articles, the studies have been revised in light of the author's more recent research. The book's force comes from the repetition of Chen Jian's major themes, which unite the decisions Mao Tse-tung and Chinese leaders made in these disparate case. The themes include a sense of geopolitical reality; an obligation and mission to aid fraternal communist parties and promote anti-imperialist revolutionary movements worldwide; the dominant force of Mao's personality; and the use of foreign affairs to promote a domestic political agenda. While these several motifs recur throughout the period, the major ones are the domi-

nance of Mao's personality in the Chinese state and his use of foreign policy to promote a political agenda that accentuated permanent revolution to create a new man.

China occupied a unique position in the Cold War because it was the object of both the affections and hostility of the two major powers. Mao's policy was to establish and maintain China's independence by destroying the nascent Russo-American division of the world that emerged from Yalta by placing China in a central position in world politics. Mao's was a foreign policy that was both Chinese and communist; the emphasis depended on circumstances. Chen Jian points out that despite the theories of the realists, ideology is important. Mao managed to project China onto the world stage and have it taken seriously despite its economic and military weakness. Chen Jian also convincingly demonstrates that foreign-policy crises were used to promote national mobilization in China.

Chen Jian aims for contemporary relevance as he discusses the last of the cases and its implications. He points out that the Communist Party's domestic disasters, culminating in Lin Biao's failed coup in 1971, resulted in a crisis of revolutionary faith. An ideologically driven state loses its legitimacy when its people believe neither in its future nor in its ideology. The crisis of faith that began in 1971 has been exacerbated by Deng Xiaoping's opening of China to the West since 1980 and the resulting inter- and intra-regional economic growth and income disparities that have obliterated Maoist egalitarianism and its exaltation of poverty. These incidents have led the Chinese Communist Party to become more Chinese as it abandons communist ideology. According to Chen Jian, this means that the Taiwan issue has greater importance than it had during the Cold War. China's domestic needs have always driven foreign policy, and the refusal to foreswear the use of force to settle the Taiwan issue indicates that communist leaders believe they have a legitimacy crisis. Having thrown its ideology overboard in pursuit of prosperity, China must emphasize its nationalist claims to bolster its au-

thority. Chen Jian's hope that China will be able to make the right choices rationally seems warranted, but he acknowledges that the next 20 years will be trying ones for China's rulers.

I recommend this book for those curious about contemporary Chinese diplomatic history, the relationship between domestic and foreign policy under Mao, and possible future courses for Chinese policy.

Lewis Bernstein, *Ph.D.,*
Huntsville, Alabama

THE DYNAMICS OF MILITARY REVOLUTION, 1300-2050, MacGregor Knox and Williamson Murray, eds., Cambridge University Press, NY, 2001, 224 pages, $27.95.

Much has been written recently about military revolutions, and much of it represents truly useful analysis. Some, however, is jargon-riddled rubbish. *The Dynamics of Military Revolution* belongs to the former category. The book's two editors, MacGregor Knox and Williamson Murray have written widely and well on the topic of military revolutions. In preparing this collection, they enlisted the services of some of the best military historians working today, among them Dennis Showalter, John Lynn, Clifford Rogers, and Holger Herwig.

Together, the contributors examine famous and not-so-famous examples of dramatic periods of change in warfare and the environment of war. Beginning with the 14th century military system of Edward III of England, the topics include the early modern revolution (exemplified in the French Army of Louis XIV); the transformation of war that followed in the wake of the French Revolution and Napoleon; the battlefleet revolution led by Britain's Jackie Fisher; the creation of the three-dimensional battlefield in World War I, and the blitzkrieg revolution unleashed by the Germans 20 years later.

Knox and Murray provide the thread linking these case studies in their opening essay "Thinking About Revolutions in Warfare." Military revolutions, write Knox and Murray, are cataclysms that reshape governments and societies as well as militaries. The military revolution of the 17th century helped found the modern nation-state and led to a Western military preeminence that

has endured into the 21st century.

In the editors' view, revolutions in military affairs (RMAs) take place within the broader framework of military revolutions and involve a conceptual rethinking of the conduct of warfare, usually within a subcategory of war. So, for example, the leading role aircraft carriers assumed in the American and Japanese fleets during World War II represents an RMA in the subcategory of naval warfare. This carrier revolution occurred as a sort of aftershock to the broader military revolution that took place during World War I.

Even if Murray and Knox had limited their book to historical cases, they would have given us enough to chew on. There is much to energize reflection and debate among military professionals. However, they conclude the book with a summary essay that reminds us that all analysis of military change must occur within a strategic context.

They are not sanguine about U.S. efforts to apply the appropriate strategic analysis to efforts to anticipate change. They find that senior military leaders tend to be technological utopians incapable of using historical perspectives and cultural insights to shape the future military. They argue that the officers who endured the Vietnam experience understand that technology is not a substitute for well-grounded concepts and doctrine. Unfortunately, as such officers leave the ranks, they are replaced by anti-intellectuals who are captive to the mechanistic approaches favored by a Robert McNamara-influenced Pentagon.

Whether one agrees with the editors' assessment or not, *The Dynamics of Military Revolution* will reward historians and military professionals alike. This book belongs on the reading lists of officers from all four services.

LTC Scott Stephenson, *USA,*
Retired, Fort Leavenworth, Kansas

AT CUSTER'S SIDE: The Civil War Writings of James Harvey Kidd, Eric J. Wittenberg, ed., Kent State University Press, Kent, OH, 2001, 140 pages, $35.00.

The preeminent biographer of Brevet Brigadier General James H. Kidd, the quintessential companion and historical chronicler of General George Armstrong Custer and his

Michigan Wolverine Brigade, returns with another glimpse into the wartime exploits of the "Boy General." Eric J. Wittenberg offers a collection of Kidd's speeches and writings that delve into the character of the legendary cavalryman and Indian fighter. From the dedication of the Michigan Cavalry Brigade Monument to a comprehensive sketch of Custer's life, Kidd describes events as only a talented and prolific writer can.

At Custer's Side is a companion volume to Kidd's memoirs and the collection of his letters. The book completes Wittenberg's literary efforts to bring to life the "trials and tribulations of the horse soldiers who followed Custer's guidon." In drawing his Custer trilogy to a close, Wittenberg once again explores the tragedy of The Battle of Little Big Horn, an event for which Kidd resolutely fixes blame on Custer's subordinate commanders Major Marcus Reno and Captain Frederick Benteen. *At Custer's Side,* however, is much more than a retelling of an epic of the Indian Wars; Wittenberg presents Kidd at his finest, as an exceptional orator and writer and as a genuine figure from a time long passed.

Originally intended to serve as appendixes to Wittenberg's earlier collection of Kidd's writings, *One of Custer's Wolverines*, *The Civil War Letters of Brevet Brigadier General James H. Kidd, 6th Michigan Cavalry* (Kent State University Press, Ohio, 2000), *At Custer's Side* is an exceptional first-person account of the Civil War exploits of one of America's most colorful military organizations and is a valuable addition to any library of "Custeriana."

MAJ Steven Leonard, *USA,*
Fort Campbell, Kentucky

THE WILD BLUE: The Men and Boys Who Flew the B-24s Over Germany, Stephen E. Ambrose, Simon and Schuster, New York, 2001, 299 pages, $26.00.

There has been considerable material written about World War II Army Air Forces. *The Wild Blue: The Men and Boys Who Flew the B-24s Over Germany* is a compelling story of heroism, commitment, and death on a scale perhaps not matched since that time. The majority of the information in the record focuses on the men of the Eighth Air Force headquartered in England and on the

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Boeing B-17 heavy bomber. Far less has been chronicled on the other theaters of the war or the other American heavy bomber—the Consolidated B-24. In his latest book, *In the Wild Blue,* Stephen Ambrose attempts to shed light on these lesser-known subjects.

Ambrose is no stranger to World War II stories, especially from the perspective of the individual fighting man. He is the author of several best sellers about World War II, most notably *Citizen Soldier: The U.S. Army from the Normandy Beaches to the Bulge to the Surrender of Germany, June 7, 1944-May 7, 1945* (Touchstone Books, New York, 1998) and *D Day: June 6, 1944: The Climactic Battle of World War II* (Touchstone Books, New York, 1995), which are excellent books. In *The Wild Blue,* Ambrose tells the story of Lieutenant George McGovern, a B-24 pilot and member of the Fifteenth Air Force headquartered in Italy. McGovern survived the war and became a U.S. Senator, and in 1972 he was the Democrat Party candidate for President.

While the book centers on McGovern and his crew, it also tells the story of countless other B-24 crewmembers and Army Air Forces veterans. However, this is also the book's flaw; it is almost impossible to follow. The individual accounts provide interesting reading, but Ambrose's movement between characters is routinely awkward and distracting.

Ambrose does a credible job of telling the McGovern story, but unfortunately, he misses the mark on the B-24 story. The B-24 was active in all theaters of the war, not just Italy. Missing are the accounts of the 1943 raid on the Ploesti oil refineries in which only B-24s participated, and losses neared 40 percent. Also missing is the entire B-24 story in the Pacific Theater where the B-24 proved far superior to the B-17. Finally, where is the story of the rookie crew of the B-24 named *Lady Be Good* who overshot their base at Benghazi while returning from their first mission? They perished in the Libyan desert, and the crash site was only discovered in 1958.

In the end, the story of the B-24s and their crews remains untold. While some portions of this book are interesting, most readers, especially those interested in World War II aviation, will find Ambrose's work incomplete.

MAJ Ted J. Behncke, Sr., *USA, Fort Leavenworth, Kansas*

APRIL 1865: The Month That Saved America, Jay Winik, HarperCollins, NY, 2001, 461 pages, $32.50.

Jay Winik rightly argues that April 1865 was an essential cornerstone in American history. With maybe a touch of hyperbole, he asserts that April was "perhaps the most . . . crucial month . . . in the life of the United States." Civil War scholars certainly would agree that the events of that April were essential, but whether they could be considered the most decisive in the history of the Republic is another matter. Historians could reasonably argue that July 1776, October 1781 (the surrender at Yorktown), or even July 1863 with Union victories at Vicksburg and Gettysburg were as decisive as April 1865.

Winik bases his contention on General Robert E. Lee's decision not to disperse the Army of Northern Virginia and conduct a guerrilla campaign, the fall of Richmond, the surrender at Appomattox, the assassination of President Abraham Lincoln, and the transfer of power to Vice President Andrew Johnson. Certainly such a campaign would have had dire consequences not only for the South, but also for the Nation as a whole. These contentions are strong points in his favor. Had any of these events turned out differently, history might have been changed.

Other strengths are Winik's analysis of the Constitution and whether states actually had the right to secede; an extensive discussion about arming slaves; Lincoln's views of giving blacks the right to vote; and the precedents for presidential succession, particularly John Tyler's succeeding William Henry Harrison in 1841; and the consequences of the surrender of Confederate General Joe Johnston's Army of Tennessee to Union General William T. Sherman after Lincoln's murder.

There are several areas that detract from Winik's work. The first is his tendency to go off on tangents. For example, he attempts to compare and contrast Lee's march westward from Appomattox with the 1942 Bataan Death March, and he devotes 12 pages to Lincoln's background while admitting that "nothing . . . about his background recommended Lincoln to the daunting task he was about to face." Lincoln's views on slavery were relevant, and Winik does address them, but they get lost in detail.

Winik's unconventional style of footnotes (a combination of bibliographical essay, highlighted words, and phrases) is cumbersome. Also, there are too many instances where information that should have been footnoted is not. For example, Winik states that Davis "vows to fight on," yet there is no source for Davis's vow. Winik quotes a letter from Lee but provides no note as to when it was written, to whom, or where it can be found. These are serious shortcomings in a scholarly work. Finally, although he devotes approximately 16 pages to Johnston's surrender in North Carolina, the surrenders of Confederate armies in North Carolina, Alabama, and the Trans-Mississippi Department are barely mentioned. Winik should have drawn a closer, more direct, connection between Lee's surrender and the decisions by commanders in those areas to capitulate. One paragraph is hardly adequate.

April 1865 has received advance praise from several noted historians for its subject matter and readability. At the risk of offending those luminaries, I found the book at times to be difficult to follow because of the "rabbit trails" Winik follows. Even in the conclusion Winik describes the physical setting of post-war Washington—a subject that has no relation to April 1865. I also consider the lack of footnotes and the style of those he provides to be serious weaknesses. That said, the book does address areas of great national importance that had a dramatic effect on the United States as we know it today, and thus, the book is a significant contribution to the historiography of the American Civil War.

LTC Richard L. Kiper, *USA, Retired, Ph.D., Leavenworth, Kansas*

GERMAN ANGLOPHOBIA AND THE GREAT WAR, 1914-1918, Matthew Stibbe, Cambridge University Press, New York, 2001, 267 pages, $59.95.

This book examines the German mentality toward the English during

World War I. Matthew Stibbe draws from archives, personal correspondence, and newspapers. The primary arrangement is chronological, but various topics are addressed in each chapter. After introductory information, the focus is developed into the debate surrounding German war aims vis-à-vis annexations and unrestricted submarine warfare.

The book is well written and moves at a fair pace. One important note is that if the reader is not knowledgeable in German, it would be a good idea to have a reference handy because of German terms and newspaper names. This book has value for the defense community as a tool to understanding the mentality of a people and how they were affected and influenced by propaganda and the popular media.

One side note: Stibbe refers to the British people as English. The explanation for doing this is that he sees referring to them as English as derogatory. He equates the use with his view that the British were imperial mercantilists. This also leads to the word anglophobia rather than something like "Britophobia."

Overall, the theoretical framework seems logically formulated. The only major problem is the conclusion. The book purports to deal with anglophobia during World War I, but the lion's share of the conclusion discusses anglophobia and the Nazi party during the interwar period; it never seems to make its point about German anglophobia.

SPC David Schepp, *USA,*
Fort Benning, Georgia

DAY OF DECEIT: The Truth About FDR and Pearl Harbor, Robert B. Stinnett, Touchstone Books, NY, 2001, *399* pages, $16.00.

Robert B. Stinnett is a World War II Navy veteran who later joined the *Oakland Tribune* as a photographer and journalist. Stinnette also wrote *George Bush: His World War II Years* (Diane Publishing Co., Collingsdale, PA, 1992).

Essentially, the theme of *Day of Deceit: The Truth about FDR and Pearl Harbor* is reflected in its title. The questions are "What did U.S. intelligence know about Japanese intentions?" "What did U.S. intelligence communicate to the President of the United States?" "What

did the President do with the information?"

This book is controversial, and as I read it, my thoughts swung from believing Franklin D. Roosevelt knew about Japanese intentions to believing he knew nothing. If he knew what Japanese intentions were, then why did he not instruct that such information be distributed to the appropriate personnel and offices?

Day of Deceit has a large number of endnotes, references, and facsimiles of relevant documents that are useful for further research. Reading the book and judging its validity is a research project in its own right. I recommend this book, but not because I believe it represents historical fact or because I agree with its conclusions, but because it provides information about a subject that will be discussed and debated long into the future.

Richard L. Milligan, *Ph.D., Fort Leavenworth, Kansas*

PEARL HARBOR STORY, Henry Dozier Russell, Mercer University Press, Macon, GA, 2001, 160 pages, $19.00.

Major General Henry Dozier Russell, a member of the U.S. Army Pearl Harbor Investigation Board, which finished its work in 1944, stated, "I doubt if at any critical time in our history our interests were in the hands of a weaker group of men than those constituting the War Department in December 1941." As a member of the Board, Russell was sworn to secrecy, an oath he promised to himself to violate as soon as the war was over. This book is Russell's testimony of the Board's activities and findings. He dictated it in 1946, but it was unpublished until now. To appreciate the book, one must appreciate the man.

Russell was a National Guardsman who, by his own admission, had little faith in active-duty soldiers. Before the war, Russell was the commanding officer of the 30th Division. Once the war began, the Army retired or reassigned many National Guard leaders in favor of Regular Army officers. Russell was not excepted: "I was relieved from the command of the Division and sent before a reclassification board. . . . Such conditions were created by the Regular Army as a part

of an overall policy to eliminate the National Guard as a major component of the Army of the United States. It was my firm belief that Chief of Staff [George C.] Marshall played a large part in the formulation and execution of this anti-National Guard policy. Certain it is that his conduct in the purge of the 30th Division was utterly and almost unbelievably reprehensible."

Despite his training as a lawyer, which dictated his impartiality and his protestations of always trying to be fair, his anger toward the Regular Army, in general, and Marshall, in particular, seethes throughout the book. Russell's anger is so great that anyone who gives testimony supporting Marshall is painted as either part of a great military conspiracy to cover up the truth or as totally inept.

Russell feels with equal vigor that General Walter Short was made a scapegoat. All testimony against Short is downplayed and invariably Short's mistakes are the result of malfeasance by Marshall (or at the least, the stupidity of Marshall's school-trained staff officers). This attitude is so pervasive as to become distracting. Worse, it hides important lessons that can be learned from the mistakes of the past. However, once past the hyperbole, the reader finds fascinating lessons learned—some of which we are still learning.

Problems associated with a lack of a unified commander; of living in a peacetime democracy yet preparing for war; of writing orders with an eye on culpability; of having too much authority vested in one individual; and of course its corollary, not having enough authority vested in subordinates, are all indicated in the failures at Pearl Harbor. The reader will even find a hint of the dangers associated with political correctness in the intelligence community at not spying on the Japanese because we were not yet at war and did not want to offend them. The book, a fascinating foray into the workings of the War Department in 1941 and the Army Pearl Harbor Investigation Board, gives an interesting picture of how and why the United States was caught so completely by surprise.

LTC David G. Rathgeber, *USMC, Retired, Fallbrook, California*